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Lari-Markus Haataja

Payment Services Directive II

Effects on Business Models and Strategies

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Supervisor: Professor Marina Biniari
Instructor: Mikko Teerenhovi, Architect

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ABSTRACT OF MASTER'S THESIS

Author:	Lari-Markus Haataja		
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The payment service industry has been emerging rapidly after the Internet created a demand for faster online payments. This has led the industry into a race with the regulators who are trying to control the new services and maintain consumer protection. The European Commission (EC) introduced the first Payment Services Directive (PSD) in 2007, which defined the new industry of payment services. However, many new payment service providers are still left outside the scope of the PSD. Currently the EC is working on an updated PSD II that will widen the scope of the regulation yet to another category of service providers, the third party providers. The new directive is anticipated to be introduced by 2016.

This study looks into the payment service industry from an institutional theory perspective, and approaches the introduction of new regulations as a factor increasing the institutional complexity of the industry. Along the lines, this study aims to study the impact of such increasing institutional complexity on the business models of the companies operating in the industry. In specific, the research questions of the study address how maturity, strategic field position and identity of an organization in the payment service industry affect its experience of and responses to institutional complexity. This area has received only limited attention in the academic literature.

The research setting is studied empirically by conducting a multiple case study on payment service companies in Finland. The study aims to explore the impact of the PSD II in terms of the business models of these case companies. The sample used in this study consists of 6 companies in total, 3 payment institutions regulated by the PSD and 3 other companies considered as potential third party providers under the scope of the future PSD II. The primary source of data in the study is interviews with company representatives.

The results of this study indicate that the structure and maturity of an organization has a significant impact on how the organization experiences and manages institutional complexity. The mature organizations have developed more comprehensive practices for managing external demands and can therefore better see the big picture, while less mature organizations are overwhelmed by the complexity. There is also a clear demonstration that the more mature payment institutions are likely to respond to the PSD II by becoming more central in the field, while the third party providers stay at the periphery and only increase the scope of their target customer segments.

Keywords:	payment services, payment systems, strategy, regulation, EU, PSD, PSD2, XS2A, payment services directive, third party providers
Language:	English

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Maksupalvelutoimiala on kehittynyt nopeasti Internetin lisääntyneen ja laajentuneen käytön muodostettua tarpeen nopeammalle maksunvälitykselle. Uusien palveluiden syntyessä lainsäätäjät yrittävät ohjata niiden kehittymistä ja varmistaa riittävän kuluttajasuojan. Euroopan komissio julkaisi vuonna 2007 ensimmäisen maksupalveludirektiivin (Payment Services Directive, PSD) ja samalla loi uuden maksupalveluiden toimialan. Siitä huolimatta monet uudet palveluntarjoajat toimivat edelleen direktiivin sääntelyn tavoittamattomissa. Parhaillaan Euroopan komissio on laatimassa uutta maksupalveludirektiiviä (PSD II) joka määrittelee jälleen uuden toimijakategorian: kolmannen osapuolen maksupalveluntarjoajat. Lopullinen versio uudesta direktiivistä odotetaan julkaistavan vuoteen 2016 mennessä.

Tämä tutkimus tarkastelee maksupalvelutoimialaa institutionaalisen teorian näkökulmasta lähestyen uuden lainsäädännön täytäntöönpanoa tekijänä, joka lisää toimialan institutionaalista monimutkaisuutta. Tutkimuksen tavoitteena on selvittää, miten institutionaalisen monimutkaisuuden lisääntyminen vaikuttaa alalla toimivien yritysten liiketoimintamalleihin. Tämän tutkimuksen tutkimuskysymyksillä pyritään vastaamaan siihen, miten maksupalvelualan organisaatioiden kypsyys, strateginen sijainti toimialalla ja identiteetti vaikuttavat siihen, miten organisaatiot kokevat institutionaalisen monimutkaisuuden ja reagoivat tähän. Tutkimusaihe on saanut aikaisemmin vain vähäistä huomiota tieteellisessä kirjallisuudessa.

Tutkimus käsittelee aihetta empiirisesti usean tapauksen tapaustutkimuksella suomalaisissa maksupalvelualan yrityksissä. Aineisto kerätään pääasiassa haastattelemalla yritysten edustajia. Haastatteluissa pyritään selvittämään PSD II:n vaikutuksia yritysten liiketoimintamalleihin. Otanta käsittää 6 yritystä, joista 3 on PSD:n piirissä toimivia maksulaitoksia ja 3 muita alan yrityksiä, jotka voisivat toimia kolmannen osapuolen maksupalveluntarjoajina tulevan PSD II:n piirissä.

Tutkimuksen tulokset viittaavat siihen, että yritysten rakenteet ja kypsyys vaikuttavat merkittävästi niiden tapaan kokea ja hallita institutionaalista monimutkaisuutta. Kypsemmät yritykset ovat kehittäneet kattavia toimintamalleja ulkoisten vaatimusten hallintaan, ja ne kykenevät paremmin hahmottamaan suuremman kokonaiskuvan kuin nuoremmat yritykset. On myös selkeitä viitteitä siitä, että kypsemmät maksulaitokset tulevat reagoimaan PSD II:een pyrkimällä alalla keskeisemmiksi toimijoiksi, kun taas nuoremmat kolmannen osapuolen palveluntarjoajat pysynevät toimialan reuna-alueilla keskittyen laajentamaan asiakassegmenttejään.

Asiasanat:	maksupalvelut, maksujärjestelmät, strategia, lainsäädäntö, EU, PSD, PSD2, XS2A, maksupalveludirektiivi, kolmannen osapuolen palveluntarjoajat
Kieli:	Englanti

Abbreviations and Acronyms

EC	European Commission
EMD	Electronic Money (E-money) Directive
EMI	Electronic Money (E-money) Institution
EU	European Union
FCA	Financial Conduct Authority (The name of the FSA in the United Kingdom)
FSA	Financial Services Authority
NBFI	Non-bank financial institution
PSD	Payment Services Directive
PSD II	The second Payment Services Directive
PSP	Payment service provider
TPP	Third party (service) provider

Contents

Chapter 1

Introduction

1.1 Background

The history of payment service providers, in their current definition, does not date far back. Traditionally banks have been the main institutional players in the world of money and payments, but technological development and the rise of e-commerce have created new types of needs for handling financial transactions with ease in a global environment and encouraged the emergence of new service providers. Online payment services, such as PayPal, started to pop up only a couple of years after the birth of the World Wide Web (González, 2004).

The financial technology industry has been growing fast in recent year. Skan *et al.* (2015) report that the global investment in 'fintech' ventures have tripled to $12.21 billion in 2014 which is significantly more than the growth in the overall venture-capital investments. A recent initial public offering of an online peer-to-peer lending platform LendingClub is a good example of how new innovations challenge the old ways of the industry. LendingClub has reportedly originated billions worth of loans to consumers without having any of those loans in its own balance sheet (Athwal, 2014). This has been possible with the help of new technologies as the Internet has enabled LendingClub to easily connect lenders and borrowers across countries. At the same time, mobile banking solutions, e-wallets, cryptocurrencies and open source movements have taken the industry forwards at several other fronts (Skan *et al.* , 2015).

As an outcome of these changes, the need to regulate the payment service industry has become more prevalent over the last two decades (Salmony, 2014). The regulation of the payment service industry has varied across different countries. The Payment Services Directive (PSD) came into force across the EU in 2009, practically defining the new industry of payment services. The PSD allowed the provision of payment services to end-users by a new category of non-bank financial institutions (NBFI), lowering the barrier to enter the payment service industry and opening competition at the pan-European level.

Since the adoption of the PSD, new types of payment services have emerged. However, many of them offer Internet payment services and are so-called third party providers that offer payment initiation services without entering into the possession of the customer funds. In other words, these third party payment service providers work between the end users and account servicing payment service providers (banks and NBFIs). The third party providers are currently not subject to the payment service directive. This has been seen as a legal vacuum that may impede innovation and appropriate market competition in the payment service industry (European Parliament, Council of the European Union, 2013).

In view of this gap, the European Commission is bringing a new directive, the Payment Services Directive II (PSD II), which is anticipated to open up the industry even more, by including a new category of third party payment service providers in its scope. The draft for the PSD II was published in 2013 and the approaching trilogue negotiations indicate that the final version will be accepted in 2015 or 2016 (The European Payment Institutions Federation, 2015a). Typically EU directives need to be transposed into national law within two years after officially accepted (McKenna, 2014).

The proposal for the PSD II has received both support and concerns from the industry (The European Payment Institutions Federation, 2015a). The financial and operational impact of the directive has been analyzed (McKenna, 2014). Some experts have focused on analyzing the effect on interchange fees (Casanova, 2013), while others have addressed the introduction of the more radical account access services (Maughan & Deane-Johns, 2014). The overall consensus seems to be, however, that the changes are welcome, but there is a concern on some specific details of the directive.

Although the new directive has not been publicly accounted, the industry knows that one of its key additions is a so-called 'Access to Account' (XS2A) feature (Salmony, 2014). The feature requires account servicing payment service providers (both banks and NBFIs) to allow the customer to use third party payment service providers when obtaining payment services. In other words, this will enable third party service providers to build services that use the customers' payment account data and are even able to initiate payments (with the customer's consent of course).

1.2 Research Problem and Objectives

Considering this industry context and the anticipated introduction of new regulatory derivatives in it, this study aims to understand how different organizations in the payment service industry manage the introduction of new legislations. Specifically, I intend a) to critically assess the PSD II and its effects on the industry, as well as to analyze its strategic threats and possibilities as perceived by the involved parties, and b) to form a hypothesis on how the organizations plan on responding to the introduction of the PSD II, for example, by adjusting their business model. The specific research questions of the study have been formed as follows:

1. How the maturity, field position and identity of an organization in

the payment service industry affect its experience of institutional complexity?

2. How will organizations with different stages of maturity, field position and identity change their business models in response to the Payment Services Directive II?

The evaluation of the research problem requires good knowledge of the regulatory environment of the payment service industry, as well as an understanding of organizational and business model theories.

1.3 Scope of the Study

This study evaluates the payment service industry within the European Union, and primarily in Finland. The study does not include banks or other credit institutions. The evaluation focuses on the current status of the industry and organizations, ignoring how the industry and organizations have developed in the past during a longer time period. The study looks into organizational theories mainly from the perspective of for-profit organizations, and as such governmental and non-profit organizations are not included. The business models are evaluated in a practical manner, in terms of how the companies operate when creating, capturing and delivering value.

1.4 Research Methods

This thesis consists of a literature study and an empirical multiple case study. The literature study focuses on institutional theories, institutional complexity, organizational responses and business models mainly from the more recent period after 1990s. An inductive form of empirical study was chosen, because the goal is to build a theory from scratch. In addition, comprehensive theories that could be tested were not found during the preliminary literature review. Multiple case studies are a good way to explore complicated phenomena while still getting some repetition in order to identify possible patterns (Eisenhardt & Graebner, 2007).

1.5 Structure of the Report

The thesis follows a structure that first introduces the background of the topic in Chapter 2, with the goal of providing a general understanding of the payment services. Next, Chapter 3 provides insights on the existing literature on institutional theories and business models. The methodology is introduced in Chapter 4 and results of the multiple case study are presented in Chapter 5. In the end, the discussion and conclusions in Chapter 6 assess the study as a whole and bring broader views on the results and possible future research.

Chapter 2

Regulation in Payment Services

2.1 Introduction

This chapter aims to contextualize the thesis and describe the regulatory framework within which payment service providers operate. I start by outlining some of the earlier payment service regulations in the European Union, including the first Payment Services Directive (PSD). Next, I move on to explain the rationale behind the introduction of the new Payment Services Directive II (PSD II), and how it is supposed to improve the regulatory landscape in the EU.

2.2 Current Payment Service Regulations

The European Commission published the first Payment Services Directive in 2007 and all member states were required to transpose it into national laws by November 2009 (The European Commission, 2007). The motivation behind the introduction of the PSD was to ensure that cross-border electronic payments within the EU would become as easy and secure as domestic payments. The target was to improve the European Single Market by making it easier for money to move within the internal market. The timeline of the recent regulatory changes has been summarized in Figure 2.1

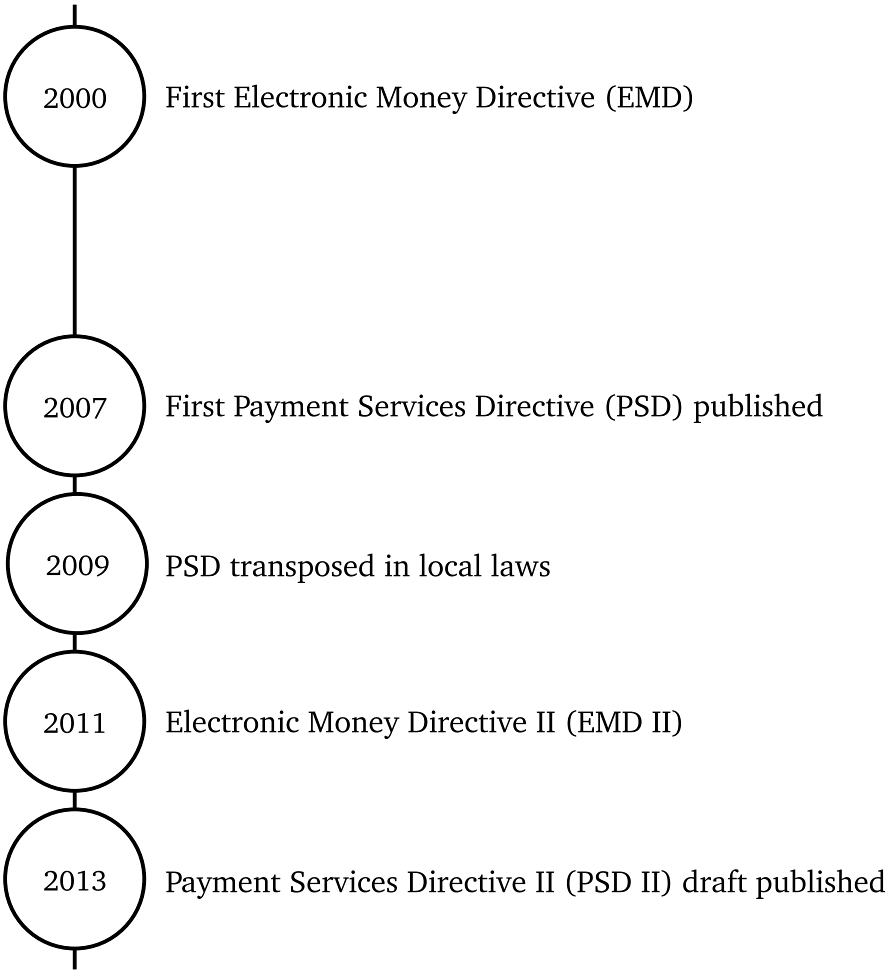

Figure 2.1: Timeline of payment service directives in EU. Source: Compiled by the author from Patel and Armstrong (2013)

Before the PSD, payment services were regulated by national legislations with a high degree of variability. The EU had introduced the Electronic Money Directive (EMD) in 2000. The EMD regulated the activities of Electronic Money Institutions (EMIs) that are defined as companies, other than credit institutions, issuing means of payment in the form of electronic money (European Parliament, Council of the European Union, 2000a).

One important aspect of the PSD was that it defined a new category of Payment Institutions. The payment institution license can be granted to a company that offers payments services, but is not a credit institution or an EMI. A payment institution can produce a wide range of payment services, including operating a payment account, executing payment transactions, issuing and acquiring payment instruments and money remittance. (European Parliament, Council of the European Union, 2000b)

The PSD significantly reduced the originally required capital to enter into the regulated market. The first EMD required electronic money institutions to hold an initial capital of one million Euros (Janczuk-Gorywoda, 2010). The PSD allowed payment institutions to launch several new types of payment services with an initial capital of only 125 000 Euros. In 2011, the second Electronic Money Directive (EMD II) reduced the initial capital for the EMIs to 350 000 Euros (Patel & Armstrong, 2013). The changes have resulted in an increased number of payment institutions. In 2012, there were reportedly 568 registered payment institutions in the EU (The European Payment Institutions Federation, 2015b).

The PSD regulates the activities of payment service providers (PSPs). In addition to the new category of payment institutions, the current definition of PSP includes credit institutions and banks, issuers of e-money, non-bank issuers of credit cards, money remitters and non-bank acquirers of merchants, post office giro institutions, central banks and other member state authorities (European Parliament, Council of the European Union, 2000b). Several other firms such as mobile phone operators and firms involved in phone call and sms payments also lie within this definition, depending on the structure of their respective activities and the types of payment services they offer. However, many of these companies have been exempted from the obligations of the PSD with other directives.

The current directive has, to some extent, fulfilled its purposed mandate, but in some areas it does not precisely reflect the operational, technological or contractual reality of the manner in which various payment methods function. The current legislation has some inconsistent exemptions and the effects are uncertain in numerous respects (Patel & Armstrong, 2013). While the Financial Services Authority (FSA) in the UK became the first one to try and clarify the application of the PSD, the requirement of 'maximum harmonization' limited the ability of EU member sates to resolve any challenges encountered during the transposition of the PSD into the national law (European Parliament, Council of the European Union, 2013).

There are several situations that are not properly covered by the PSD and have brought it under a closer review by the industry. Firstly, the PSD exempts so-called limited networks, but it does not define a limited network in detail. The limited network exemption has been applied to many large networks that involve high payment volumes, which goes beyond the original purpose of the exemption. (European Parliament, Council of the European Union, 2013)

Another issue is digital content exemption. The current PSD provides exemption for payment systems developed by mobile phone operators, where the phones are used to provide transaction consent and the content is delivered to the phone. As long as the operator is not an intermediary, the activities are not regulated by the PSD. This is very unclear despite the guidance from the FSA and EU. (Mercado-Kierkegaard, 2007)

The third issue in the current PSD legislation is the use of commercial agents that are authorized to negotiate or conclude the purchase on behalf of the payer or the payee (European Parliament, Council of the European Union, 2013). The first PSD does not include commercial agents in its scope. The exemption has been used by e-commerce platforms with payment transactions where the company has acted as an agent for both the seller and the buyer at the same time (Janczuk-Gorywoda, 2010). This is not the purpose of the exemption and should be fixed.

The last issue concerns payment initiation services that are currently not regulated by the PSD. Payment initiation service refers to the activities of third party service providers that have the capability of authorizing payments from an online bank account of a customer. (Murdoch & Anderson, 2014)

While the review of the current PSD confirms that it has been mostly fit for its purpose, it also reveals that some of its objectives need to be modernized in order for it to cover the future payment service types and solve the above-discussed issues. The service providers have been able to bring competition and innovation into the market through the provision of alternative and mostly less costly payment solutions through the Internet. Many of these activities are not properly regulated. The clarity of the regulatory environment has also caused issues. Many new payment service providers have for example struggled with the choice to be made between an e-money and a payment institution license (Fatier, 2014). By bringing the different players under the scope of the same directive, all the payment service providers within the European Single Market would have equal chances of providing new types of payment services (Patel & Armstrong, 2013).

2.3 The Payment Services Directive II

In July 2013, the European Commission published the 'Proposal for a Directive of the European Parliament and of the Council on Payment Services in the Internal Market', a revised Payment Services Directive (The European Commission, 2013). The goal of the PSD II is to improve the European payments market by introducing a number of improvements. Mainly the PSD II intends to increase security of consumers by requiring stronger protection and authentication, and by bringing more services under the regulation. Maybe the most important element of the new directive is said to be the so-called access to accounts proposal (XS2A), which would require regulated payment service providers to open their customer accounts to third party providers (TPPs) (Salmony, 2014).

2.3.1 Improvements to the First PSD

The Payment Services Directive II addresses most of the issues that were mentioned earlier. The issue of limited network has been addressed in the PSD II by stating that all businesses planning to use the limited network exemption need to be cleared by the local regulator. The PSD II also sets limits for the payment volumes in a limited network. (European Parliament, Council of the European Union, 2013)

The digital content exemption is also defined in more detail and has been made exclusively to ancillary payment services that have been implemented through electronic communication networks or services, such as mobile carriers (European Parliament, Council of the European Union, 2013). The PSD II narrows the exemption specifically to micro-payments for digital content that is subordinate to electronic communication services (European Parliament, Council of the European Union, 2013).

The issue with commercial agents has been clarified in the PSD II by specifying that the exemption would only apply to situations where the company acts as an agent for either the payer or the payee, but not both at the same time (European Parliament, Council of the European Union, 2013).

Finally, probably the most important fix in the PSD II is that the third party service providers are taken under the scope of the regulation (Salmony, 2014). The PSD II states that TPPs will be allowed to offer services based on access to payment accounts, without being an account servicing payment service provider (European Parliament, Council of the European Union, 2013). These third party services can be both payment initiation services and account information services.

The target of these improvements would be to contribute to a more efficient and integrated payment market, ensure payment security and consumer security, enable cheaper payment transactions and facilitate the emergence of better interoperability and technical standards (Janczuk-Gorywoda, 2010). Overall, the PSD II will improve the payments industry quite significantly especially from the point of view of new innovative service providers.

2.3.2 Impact Assessment

The evident change in the scope of the directive is probably the most significant impact of the PSD II. In its current form, the PSD II will affect financial institutions that are already in operations within the PSD scope, as well as actors currently outside the scope of the regulation. Examples of the latter kind are e-commerce community operators, loyalty schemes, gift cards, public communications networks, services of account access, mobile wallets, invoicing and billing services and any individual receiving payments through direct debit (Murdoch & Anderson, 2014).

The new rules, definitions and clarity could have a positive impact on the operations of payment service providers and provide the consumers with better and more variety of payment services as well as service providers. This would enhance innovation and competition. Through the introduction of the PSD II, mere contractual obligations for the third party providers will be replaced by regulation. This will mean that consumers will be better protected against abuses, fraud and other incidents. Payment service providers will thus have to improve their security levels so that customers' accounts are safe and protected. Standardized security protocols could improve efficiency and effectiveness in their operations, but also bring some challenges (Delfino, 2014).

The PSD II will improve the access of third party providers to information and thus certainly change the responsibilities of payment service providers as custodians of consumer information. The inclusion of

TPPs in the information flow creates a new range of dynamics that affect the flow and relationships between payment service providers and their consumers. These dynamics will necessitate PSPs to conduct various analyses regarding the application of certain laws to different scenarios. This entails legal issues related to breaches of consumer privacy, level of access to consumer information, and the extent of access granted to TPPs.

All payment service providers, whether they are TPPs, banks or payment institutions, will be required to prove that a security mechanism is in place to enhance secure and safe payments. Security risk and operational assessment as well as the measures adopted will need to be done periodically. Payment service providers are also required to make sure that there is a solid consumer authentication for the payments with payment instruments that are not available at the point of sale (for instance, Internet payments) (Patel & Armstrong, 2013). This will increase conformity across all service providers.

The PSD II also significantly tightens the customer support requirements for payment service providers. The PSPs need to put in place a procedure for complaints by the consumers to be used before an out of court redress is sought for (European Parliament, Council of the European Union, 2013). The deadline for processing complaints has also been reduced from 8 weeks to 15 days (European Parliament, Council of the European Union, 2013). If the complaint cannot be processed within 15 days caused by issues beyond the control of the payment service provider, the customer needs to be informed about the reason within the time frame. In any case, the processing shall not take more than another 30 days. The new directive requires the member states to form competent authorities that can handle any complaints from service users as well as other parties interested, for example consumer associations. This will ensure good relationship between the service providers and their customers.

In addition to evaluating the ability of TPPs to maintain consumer privacy, financial institutions might need to implement compliance programs. Compliance risks often arise when third party providers violate regulations, rules, and policies that govern institutional standards and procedures. TPPs might engage in practices that are not consistent with financial ethics or policies, or that violate the contractual agreement (Crosman, 2014). Failure to comply with certain policies and regulations could increase the level of liability to financial providers because security breaches involving violation of confidential consumer information attracts fines. It is, therefore, the responsibility of financial institutions to exercise adequate oversight and implement monitoring responsibilities to avoid cases of non-compliance from third party providers.

It seems apparent that the PSD II will enhance market entry and make a significant contribution towards the European single market. Since the adoption of the PSD, numerous services in Internet payments have emerged. Many of these companies provide so-called account information services that gather and combine the customer's information from various payment accounts into a single place (Mercado-Kierkegaard, 2007). These type of services make it possible for example to calculate the net worth of the customer's funds and allow better cash balance management across different payment accounts (Salmony, 2014). Currently these so-called overlay services are not regulated by the PSD. The PSD II would take them under its scope as TPPs, improving the protection of the customers. The PSD II requires TPPs to register with the local regulator (Salmony, 2014).

Until now, it was challenging to enter the payment market for TPPs because of the numerous barriers that would limit them from providing their answers and solutions in different states and on a large scale (Janczuk-Gorywoda, 2010). The removal of these barriers will see many players enter the market and offer cheaper means of payments to consumers. The TPPs will adhere to the same regulations just like all other payment service providers including licensing, supervision by authorities and registration (Murdoch & Anderson, 2014). Furthermore, the new requirements in terms of authentication and customer protection would make all payment service providers tighten the online payment security.

When third party providers come into the picture, the payment services can be seen as a two-sided market. On one side are the payment service users who consume the payment services, and on the other side are the TPPs who provide additional services for the payment service users.

There have been several studies on the pricing structures of two-sided markets, and for payment services the law of one price seems to be dominant (Chakravorti & Roson, 2006). Merchants want to charge the same price regardless of what is the underlying cost of different payment methods and instruments. The PSD II does not specify how payment service providers should charge TPPs for the access to their data. According to Salmony (2014), the banks and payment service providers should get a fair compensation for the use of their infrastructures, such as the so-called 'last mile' charge that telecommunications networks charge from third party providers. The TPPs will face the pricing challenge if they provide services to the users of several payment service providers with different pricing schemes.

The PSD II will also allow payment service providers as well as consumers to benefit from internal markets especially with regards to e-commerce. The directive is aimed at expanding the electronic payment market and such integration is gaining significant focus for payment service providers as the world is becoming digitalized and moving away from the traditional brick-and-mortar operations. This will enhance effectiveness and efficiency in these firms (Delfino, 2014).

Nonetheless, unless the EC modifies the approach, it seems unlikely that the PSD II will be able to solve all the problems discussed earlier in the current PSD regime. While the proposed PSD II expands the sphere of regulation to include additional services that are payment-related, the legislations in the proposal do not precisely solve the more basic challenges in the current PSD and may in the contrary act as a barricade to further competition and innovation. The PSD II gives mandate to the usage of 'strong authentication of consumers', including other internal controls associated with fraud and security (European Parliament, Council of the European Union, 2013). Payment service providers will need to follow also the Network and Information Security Directive (NISD), including obligations of incident reporting and risk management (Janczuk-Gorywoda, 2010). It is of essence that mastering such approaches to security of information should not reduce innovation pace in the wake of ever-sophisticated cyber crime.

2.3.3 Organizational Perspective

The Payment Services Directive II may have several practical implications on organizations involved in the industry, and the industry overall. In specific, the directive can significantly alter the structures of the industry (field), and increase both fragmentation and centralization. The fragmentation refers to the number of factors that the organization is dependent on in order to access resources and gain legitimacy (Greenwood *et al.* , 2011). Centralization, on the other hand, refers to the concentration of power and control to key actors in the higher levels of an environment (Meyer *et al.* , 1987). Figure 2.2 portrays an example of the positions and networks of organizations in the payment service field. Banks and credit institutions that are firmly part of the core payment services are more central in the field, while the more dependent the organization is on others, the more they are in the periphery of the field.

The PSD II will include the third party providers in its scope, practically making them full members of the industry. This can increase their power in the network, affecting field dynamics in a larger scale. First, the primary functions of the industry will be distributed to a larger spectrum of organizations. This could increase competition in services that the third party providers will be able to provide easier and more efficiently. Due to increased competition, some businesses might shift their resources to their

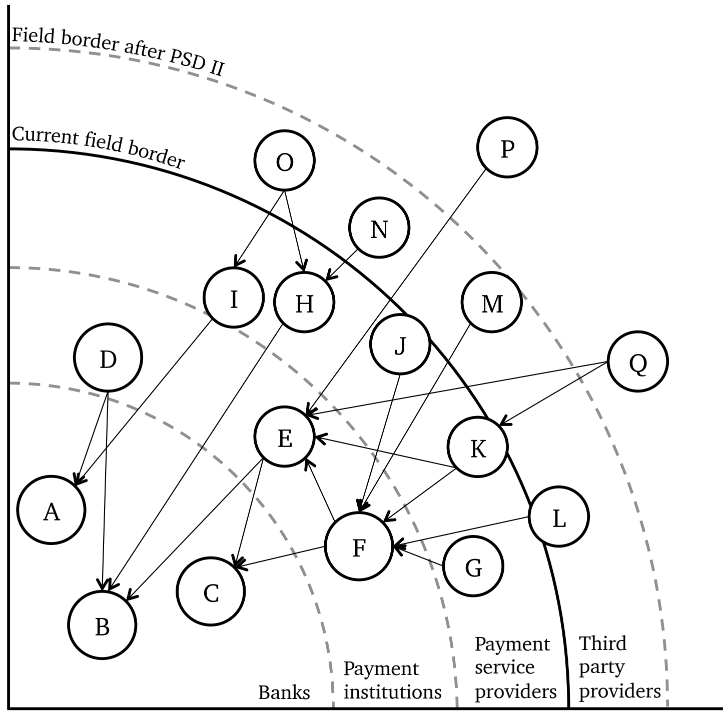

Figure 2.2: An example of organizational network in payment service field. The circles represent companies and arrows between them resource dependencies (i.e. technical integrations). Source: The author

core competencies. Thus, some services might become focused around a smaller group of organizations, which are positioned more centrally to the field. So on one hand, the fragmentation of the industry might increase with more companies focusing on specific services, but on the other hand, the centralization of the most core services might also increase. This could anticipate a significant changes in the field structure, contributing to the institutional complexity of the industry.

2.4 Conclusion

During the last ten years, the payment service regulations have been developing fast in the European Union. The Payment Services Directive II will bring new changes that will open the market even more. The addition of third party providers to the scope of the directive can shake up the field considerably.

In summary, the Payment Services Directive has been able to bring significant benefits to the economy of Europe by easing the entry for new actors in the payments market, the payment institutions, thus enhancing competition and providing more choices to consumers. The review of the PSD indicates that the current legislation is fit for its purpose but some parts need to be modernized so that they can accommodate new types of payment services. Certain rules set in the current PSD as well as exemptions have not been clear and the proposed PSD II aims to solve those.

The anticipated changes by the PSD II can be seen as a possibility for the third party providers to enter the payment service market and to adhere to the same set of rules as other payment service providers. As such, the PSD II increases transparency and lowers transaction costs through more effective and efficient operations. However, for the existing payment service providers the PSD II sets a bunch of new requirements and obligations. For TPPs the biggest threat lies in how payment service providers choose to price their new access to consumer data. And vice versa, the biggest opportunity for PSPs is in their pricing of the account access services to TPPs. Even though the PSD II can increase innovation throughout the whole industry, for the existing companies it can clearly be seen more as a threat while for the new entrants it is an opportunity.

The introduction of new directives can, at least temporarily, increase the institutional complexity through centralization and fragmentation. The upcoming changes in regulation that may be followed by field structure changes will increase the complexity of the payment service industry. Eventually the network should balance itself with each organization finding its own place. The situation creates a good opportunity to study several organizational and institutional aspects, such as how the companies experience the regulatory environment and how they respond to external demands.

The objective of the PSD II is to clarify the payment service regulations and update it to better respond to new types of services generated by technological development. However, one could question the need to increase the complexity of the field with yet another regulatory license. By the time the PSD II would be harmonized into local legislations, we may be looking at a very different kind of world with cryptocurrencies and new types of more innovative payment methods (Skan *et al.* , 2015).

Chapter 3

Literature Review

3.1 Introduction

This chapter reviews the literature related to the topic of changing regulatory environments and business models. The review draws mainly from organizational theory and strategic management literature and it contributes in constructing the theoretical model guiding this study.

Institutional complexity has been a growing field of study and is closely related to regulatory changes that have taken place in the payment service industry. First, Section 3.2 explains what institutional complexity is and how it manifests in the payment service industry. This section also briefly enlightens the background of institutional complexity literature and addresses where institutional complexity originates.

Section 3.3 reviews literature on business models. It draws from recent literature of business models, and constructs the definition of a business model used in this study.

Section 3.4 summarizes how organizations experience institutional complexity through different organizational attributes. The section builds a theoretical model for the study on recent literature.

Section 3.5 addresses how organizations respond to institutional complexity. The section attempts to provide answers to three main questions: 'why', 'what', and 'how' organizations change.

3.2 Institutional Complexity

When looking into the theories of organizational responses to changing environments, the contributions that institutional theories have given cannot be bypassed. The focus of this literature review is, in particular, on the neo-institutional theories that study how organizations interact and how they respond to environmental influences. A prevailing focus in the theories, for some time, has been on institutional complexity.

In the context of business organizations, regulatory environment comprises regulations and laws that are developed by various agencies such as the state, local governments or federals (Westwood *et al.* , 2014). The aim of issuing such regulations and laws is to exert control over various practices within the business environment (Greenwood *et al.* , 2011). These laws and regulations have been constantly changing as the number of institutions rises significantly. This is a central topic in the development of various business practices and goals to achieving international or global market (Dobbin & Schoonhoven, 2010).

3.2.1 Institutional Theories

Neo-institutional theory plays a key role in understanding and analyzing various aspects of organizational behavior and the general influence of social and political forces to various institutions (Meyer & Rowan, 1977). Neo-institutionalism can be defined as a theory that describes developing sociological aspects of different institutions (International Economic Association. *et al.* , 2008). This implies that such theories are focused on the ways through which various organizations interact with other organizations and the society at large. Key aspects of neo-institutional theories are essential in the analysis of how various organizations respond to the changing regulatory environments (Meyer & Rowan, 1977).

According to Greenwood *et al.* (2011) there are various sub-fields of neo-institutional theories such as the normative, empirical, constructive and sociological institutional theories, among others. Therefore, to study the organizational response towards changing regulatory environments, it is appropriate to look into all of the neo-institutional theories (Greenwood *et al.* , 2011). Extensive organizational structures and a complex institutional environment require the understanding of multiple institutional logics and their dependencies, in order to manage the external relationship with multiple institutional parties (Kraatz, 2010).

Various studies indicate that institutional complexities affecting different organizations continuously are generally influenced by the location of the specific organizational field (Dobbin & Schoonhoven, 2010). In addition, the extent and nature of the institutional complexities are widely influenced by the organizational location (Greenwood *et al.* , 2011). The complexities arise from various aspects such as regulatory, political, economic, societal and natural environmental forces (Westwood *et al.* , 2014). Thus, it is imperative for every organization to ensure that it manages different complexities to remain sustainable amidst various environmental forces (Meyer & Rowan, 1977). Effective management of complexities allows an organization to undertake its operations smoothly (Dobbin & Schoonhoven, 2010). In addition, the management strategies that various organizations employ vary amongst them. This is probably due to the varying degrees of institutional complexity (Greenwood *et al.* , 2011).

According to Meyer and Rowan (1977), complexity results from the modernization of societies with two reasons. First, as societies modernize and grow, the organizational networks become bigger and more complex, bringing more dimensions and layers to the interactions between organizations. Second, the amount of institutional rules, both official and unofficial, increases when societies age, adding complexity to the actions and expectations of organizations. Meyer and Rowan (1977) suggest that a postindustrial society is dominated more by the organizational complexity than production or market forces.

3.2.2 Complexity in Payment Services

Zooming in to the context of payment service, there are several institutions and other aspects that create complexity. Payment services are heavily regulated, and the regulations can come from several levels. The regulatory landscape is currently developing fast in the EU level, but the regulations are put into force by local regulators. In addition, the organizations do business with several other organizations. The payment service industry has been transforming into a multi-level system, with banks as the core operators, and payment institutions and third party service providers providing more specific services to businesses and consumers. Network theory is helpful in understanding the complexity in payment services. As some actors in the network react to regulatory changes it might require other actors to follow suit.

The theory of network effect could be seen useful when analyzing the role of third party providers in the payment service industry. When a product or service is influenced by network effect, its value to the user is partly generated by the number of other users (Katz & Shapiro, 1994). Network effects have been said to be in major role in industries where alternative technologies compete for dominance; these industries have a tendency to develop into a 'winner takes all' outcome (Suarez, 2005). When a large number of users pick one technology, it becomes more fashionable, attracting more and more new users.

Majumdar and Venkataraman (1998) noted that the literature of network effects studies mostly three types of questions: technology adoption decisions, product selection decisions, and compatibility decisions. So on one hand, there are forces that drive the decisions of buyers in choosing a particular technology and product, and on the other hand, there are factors that affect whether providers choose to make the products and technologies compatible with each other or not (Majumdar & Venkataraman, 1998).

According to Katz and Shapiro (1985), the compatibility of the products in most markets is a result of explicit decisions by the companies. The bigger the network effect is in the market, the more important the decision of whether to make the products compatible or not is (Katz & Shapiro, 1985). As the size of the network effect will depend on the number of third party service providers that emerge, it is yet hard to estimate what the reaction will be. However, in the software industry it is possible to make, in theory, unlimited number of integrations to different systems, and therefore third party providers will be able to make integrations with different payment service providers even if the PSPs are not compatible with each other.

If a PSP chooses to make their service compatible with other PSPs, it should make it more likely for a third party provider to do integrations with them. If several PSPs have compatible API implementation, it will require less effort for the TPP to do integrations with all of the compatible PSPs. After the technology has been chosen, switching the implementation becomes costly as new relation-specific investments are required (Katz & Shapiro, 1994). If the PSP changes their API implementation, also the TPPs that have made integrations with the PSP need to change their integrations accordingly. The compatibility and incompatibility of different technologies is likely to increase the complexity of external demands that the organization faces.

According to Matutes and Regibeau (1988), compatibility enhances variety. Compatibility would allow customers to mix and match products and services from various TPPs and PSPs, creating unique configurations for their needs. With compatible systems the competition focuses on the characteristics of individual components instead of the overall product (Matutes & Regibeau, 1988). According to Katz and Shapiro (1994) this implies that companies with superior package, including product, network, and reputation, are more likely to prefer incompatibility, while companies with superior individual components prefer compatibility. Katz and Shapiro (1994) found that compatibility keeps the competition steady early in the product life cycle, but intensifies competition later in the product life cycle. With compatible products, none of the companies will be able to dominate the market, which keeps the threats low in the early stage, but causes the competition to get very intense later, as companies need to significantly stand out in order to gain bigger market share. The PSD II could result in more standardized products and therefore simplify the available options, decreasing complexity that results from product compatibilities.

The literature on technology adoption and compatibility decisions has had some discussion on the role of policy-makers. According to Katz and Shapiro (1994) it may be very difficult to choose the best standard early in the product life cycle. With emerging technologies, private companies often have significantly more information than governments, making it even harmful for the market to control the technology standards in legislations (Katz & Shapiro, 1994). Salmony (2014) addresses exactly this issue by suggesting that service providers should first agree on a common service layer and only after that the standardization bodies could develop standards based on the details that the industry players have already agreed on. A similar model has worked well before, when the Internet and mobile phone networks were established by companies first implementing TCP/IP and GSM protocols only after that bringing the standardization bodies into the picture (Salmony, 2014).

It is not only the network size that makes one technology better than the others. The user communities within the network of one technology can increase the attractiveness of that technology (Shankar & Bayus, 2003). Thus, the customer network of a company can be seen as a strategic asset. Shankar and Bayus (2003) suggest that network effect is a function of network size and network strength, meaning the impact that an increase in network size has on the demand of the product or service. In addition, Suarez (2005) claims that specific parts of a network can have a relative importance to different agents that are making a technology decision.

3.3 Business Models

After reviewing the complex environment of the payment service industry I now move to the concept of business model. After all, we are interested in how business models are related to the institutional complexity.

A review on business model literature by Zott *et al.* (2011) reveals that researchers do not entirely agree on what a business model is. However, there are common themes, one of them being that business models try to provide a holistic view on how companies do business. The literature on business models spreads into multiple different fields. There are also several aspects in business models that can be studied, from describing how a company operates to studying how business models evolve throughout the time.

3.3.1 Business Model Definition

A major stream of literature looks into business models as static characteristics of organizations, 'as snapshots in time' (de Reuver *et al.* , 2009). Business models can be described as 'templates' that organizations adopt in order to embed themselves as part of the field they operate in (Zott & Amit, 2010). According to Osterwalder *et al.* (2005), the term 'business model' was first introduced in academic literature in 1957 by Bellman, Clark, Malcolm, Craft, and Ricciardi. However, it did not gain popularity until the rise of the Internet based businesses in mid 1990s and early 2000s. Business model can be used as a planning tool, but also for communicating and sharing knowledge (Magretta, 2002).

For the sake of simplicity, this study looks into business models through a conceptual tool developed by Osterwalder *et al.* (2005). Thus, this study defines a business model as *a template that describes how an organization operates when creating, capturing and delivering value*. This allows us to analyze business models in a simplified and comparable manner. Osterwalder has broken down business model into nine elements, for which the visualization by Chesbrough (2010) is presented in Figure 3.1:

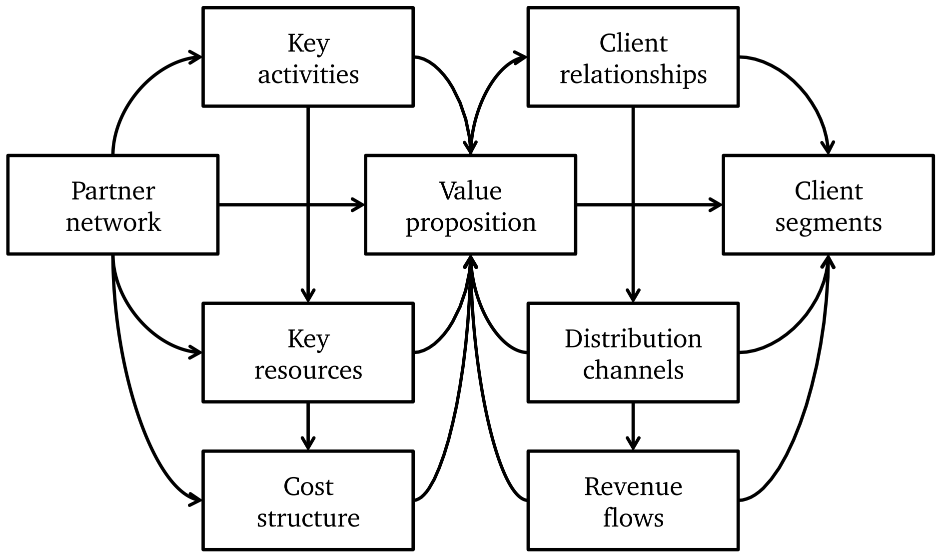

Figure 3.1: Decomposition of a business model. Source: Chesbrough (2010)

1. *Value Proposition* means what value does the business create for its customers and partners. It is important to highlight that also partners are included in the value proposition.
2. *Customer Relationships* defines what types of relationships the organization develops with the client segments.
3. *Delivery Channel* describes how the value is delivered to customer segments, in other words, how are the customers reached.

4. *Customer Segment* is one of the key elements of a business model, defining who is the business targeting its value proposition.

5. *Revenue Flows* describes how the company gets money from its customer segments.

6. *Key Activities* defines the most important tasks that an organization must undertake in order to operate its business model.

7. *Key Resources* describes what it requires from the organization to carry out the key activities.

8. *Partner Networks* are used for reinforcing and supporting the key activities and key resources. Partners can be a key part of the value network.

9. *Cost Structure* includes all the expenses that are related to operating a business model.

From these nine elements, the most important are value proposition, customer segments, partners, delivery channels and revenue streams (Zott *et al.* , 2011). As this study focuses on institutional complexities it is justified to exclude revenue streams as it is not a source of external demand. External demands are created by customers and partner organizations, thus for the purpose of this study business model is defined by customer segments, delivery channels, value proposition and partner networks.

3.3.2 Business Model Change

In addition to defining what a business model is, it is important for this study to understand why and how business models change. Especially in technology oriented industries, the competition can develop with new entrants and mergers in a fast pace, making it critical for a company to respond fast in order to survive (Linder, 2000). de Reuver *et al.* (2009)

found that most important drivers for business model changes are technological and market forces, while regulations are not as important.

According to Linder (2000), organizations can develop a 'change model' that describes how the organization reacts to changes in the environment. Schweizer (2005) highlights the importance of a dynamic perspective in business model for organizations that operate in rapidly changing fields. In specific, the study argues that, for example, an innovation may enable more profitable complementary services or assets, and thus the innovator may want to later integrate into the complementary assets. This would requiring a more dynamic business model from the innovator in order to adapt to the environmental changes.

Business model changes can happen in several ways. An organization may introduce minor modifications to its existing business model, or it may be required to develop an entirely new business model (Johnson *et al.* , 2008). According to Cavalcante *et al.* (2011), organizations try to avoid significant changes in business models, as these could question the existing models, the processes of the organization and its management. Cavalcante *et al.* (2011) also suggest that business model changes can be categorized into four types: 1) creation, 2) extension, 3) revision, and 4) termination.

Business model literature has been often linked to more traditional management and entrepreneurial research, but the dynamic nature of changing business models has guided researchers towards alternative theories. Petrovic *et al.* (2001) linked business models to system dynamics, rationalizing the importance of systems thinking and understanding of complex systems when considering business models. Similarly, an options approach to business models considers the complexity of alternative options by splitting the development into three stages: 1) assessing opportunities, 2) acquiring and nurturing options, and 3) capturing value (Kulatilaka & Venkatraman, 2001). Following the same theme, Pateli and Giaglis (2005) introduced the use of scenario planning where a set of scenarios that reflect alternative business model changes are assessed, following a contingency approach to select the most suitable scenario. Magretta (2002, p. 87), on the other hand, looked at a business model as a narrative tool that tells a good story with "precisely delineated characters, plausible motivations, and a plot that turns on an insight about value". Continuing from the narrative approach into sensemaking and enactment, George and Bock (2011) find that entrepreneurs may look at business models through specific dominance lenses based on perceived importance of different business model dimensions, explaining why organizations may focus on developing specific parts of their business models and give less importance to other dimensions.

Overall, the business model literature is still very fragmented. While there is plenty of research on the business model definitions, building on as far as the early entrepreneurship research by Schumpeter (1942), especially the research on business model changes is missing a common thread. In particular, the more recent literature that builds on systemic thinking, complex systems and narrative theories indicate that business models are interlinked with multiple concepts from organizational, strategic management and business theories.

3.4 Experience of Institutional Complexity

The increasing complexity of organizational environments, in terms of regulation, has been reforming the way companies respond to changes in the environment (Dobbin & Kelly, 2007). It has increased the interest towards routinized solutions for reaching regulatory compliance instead of short-term, case-by-case fixes offered by lawyers. This trend has also fragmented the corporate law as such. Nowadays, companies rely more on specialist lawyers to take care of specific issues, and often turn to other experts and professionals rather than lawyers to help with legal compliance issues.

The demands pressing upon an organization can be organized formally or informally (Greenwood *et al.* , 2011). According to Meyer and Rowan (1977), the formalization matters as the level of complexity is affected by the level of formal demands opposed to informal demands. It is also not self-evident whether a greater level of complexity is created by the formal demands or informal demands. On one hand, lower formalization can allow more freedom and decision-making power while higher formalization can make the demands more specific and enable an organization to respond in more calculated manner (Greenwood *et al.* , 2011). In other words, formality can make demands more clear and easier to manage.

Institutional complexity can be very fragmented. The fragmentation refers to the number of factors that the organization is dependent on in order to access resources and gain legitimacy (Greenwood *et al.* , 2011). The fragmentation can vary considerably depending on the stage of the industry. Emerging fields typically do not have clear rules and boundaries, while mature industries can have very well established regulations.

Formal organizations pose many controlled and coordinated systems arising from highly institutionalized contexts (Dobbin & Schoonhoven, 2010). However, various programs and policies are often created with the primary aim of regulating the activities of different organizations in the society. Such regulatory measures usually impact on the complexity of the organization and may either decrease or increase the complexity of an institution. Consequently, when organizations confront incompatible prescriptions, institutional complexities are inevitable (Meyer & Rowan, 1977). Previous research on institutional theories has focused more on the various conditions of conformity to institutional pressures. Organizations normally strive to comply with a set logic in order to enhance their capacities of gaining vital endorsements from significant referent audiences (Meyer & Rowan, 1977). Additionally, the logic provides the organizations with a better understanding of the social world thus enabling organizations to act confidently within it. Research has, however, demonstrated that various organizations face different logic that are incompatible and thus this generates challenges for the organization (Greenwood *et al.* , 2011).

Greenwood *et al.* (2011) have developed an analytical framework for organizational responses to the experience of institutional complexity. Presented in Figure 3.2, the framework provides a holistic view on how organizational attributes affect the organizational responses, contributing further to the industry structures and institutional pluralism. In addition, Greenwood *et al.* (2011) noted that the empirical link between the formalization of demands and experience of complexity is unknown, and a literature gap exists in how organizations experience complexity at different stages of maturity.

According to Greenwood *et al.* (2011), organizations do not respond similarly to pressures arising from institutional complexity. Organizations filter the demands with various attributes of the organization itself, which affects the response. Greenwood *et al.* (2011) name specifically the organization's field position, structure, ownership and governance, and the organizational identity.

Building on the framework by Greenwood *et al.* (2011), this study investigates a theoretical model, presented in Figure 3.3, where the effect of change in institutional complexity to the business model of the organization is moderated by organizational attributes — the structure and maturity, field position, and identity. The next sections will address the independent variables, i.e. the organization's structure and maturity, field position, and identity; and the dependent variable, i.e. the business model.

3.4.1 Structure and Maturity

The more complex an organization is, the more likely it is to experience institutional complexity (Greenwood & Hinings, 1996). This suggestion

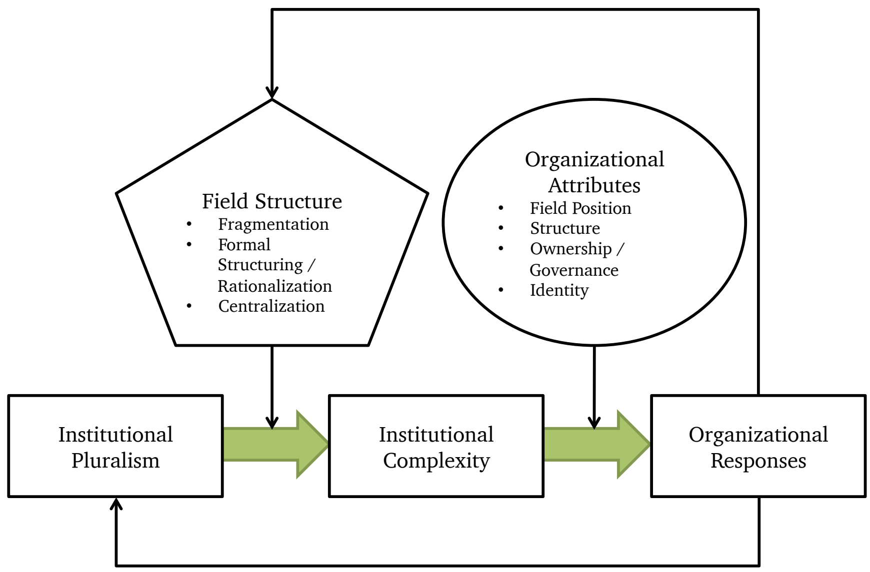

Figure 3.2: Institutional Complexity and Organizational Responses. Source: Greenwood *et al.* (2011)

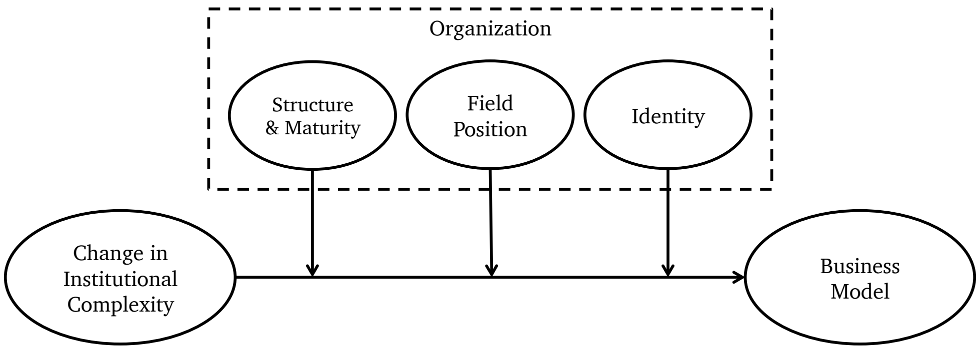

Figure 3.3: Theoretical model. Source: The author

springs from the observation that people, or in other words actors, influence organizational decisions with their personal views, opinions and priorities (Chung & Luo, 2008). The bigger an organization is, the more actors with contradictory views are part of the decision-making processes. The way an organization is structured affects how various intra-organizational groups are formed and how these groups interact with each other. The groups may be influenced by external field-level communities, which can increase the diversity of the groups within an organization (Delmas & Toffel, 2008). In bigger organizations, the level of external influence can vary a lot between different units. For example, the core units are often more buffered from external environments than units that constantly interact with external parties (Jones, 1999).

The strength of connections with external parties has a lasting effect on various practices and mechanism in an organization, but there can be a great deal of variability depending on the field the organization operates in. The agents policing different fields do not always have the same level of standard and demand for compliance. In fields where the power is not very centralized, it is more important to build strong social networks with external parties, making it possible to utilize these channels to influence the field (Malhotra & Morris, 2009).

The structure and maturity of organizations often grow hand in hand. Mature organizations are often described to have complex structures and they prefer existing businesses over new product development (Dougherty & Hardy, 1996). Mature organizations often find it easier to gain legitimacy than young field entrants who lack the experience to establish legitimacy (Kostova & Zaheer, 1999). Organizational legitimacy is determined by the extent to which the organization follows shared or common social and normative values in its organizational environment (Dowling & Pfeffer, 1975). The legitimacy can be observed especially through external endorsements (Galaskiewicz, 1985). Singh *et al.* (1986) also found that low external legitimacy of an organization can be associated with higher death rate, indicating that the legitimacy of an organization is related to its stability.

An industry that is undergoing a regulatory change can demonstrate wide-ranging inertia, especially when the final state of the change is not well known. This is not unpredictable, as it is quite natural that companies want to wait for the regulatory change to complete before making any major decisions. This behavior can be expected especially from more mature organizations. According to Peng (2003), companies have two main strategies when doing exchange in emerging industries: Network-based strategy where the transaction costs are based on relationship-based exchange; and market-based strategy where the transaction costs are based on rule-based exchange. Since there are fewer rules at the beginning of an emerging industry, everything needs to be agreed with contracts, but while the industry develops, the rules and regulations improve and the exchange between companies requires less individual contracts. Therefore, in the beginning of an emerging industry, many organizations wait for the new institutional structures to be completed and show extensive inertia (Peng, 2003).

3.4.2 Field Position

The organizations position in a field is typically categorized as central or peripheral. Organizations can experience institutional complexity differently based on their position in the field and thus not respond in the same way. Leblebici *et al.* (1991) noted that organizations located at the periphery of organizational fields are affected less by institutional relationships and expectations, and therefore more likely to experiment with new practices. More mature fields usually have well-established hierarchies and the central organization can be identified by status and size (Malerba & Orsenigo, 1996). Organizations that are located at the periphery of a field are less connected to other organizations and thus do not learn the institutional expectations and appropriate behaviors (Davis, 1991). Peripheral organizations also rarely benefit from existing arrangements and are not likely to support them, while central organizations see change as a threat and are likely to be resistant to it (Ingram, 1998).

Another way to evaluate the position of an organization in a field is through the scope of their operations. Organizations located in multiple fields, experience institutional complexity very differently (Dunn & Jones, 2010). The organizations may be pressured by several competing and sometimes contradictory institutional logics. On one hand, this can greatly increase the intensity of the institutional complexity, and the organization may experience the implied punishments for nonconformity very heavily. On the other hand, the organization is able to look at the institutional forces as if an outsider, which may even liberate the organization. A position between fields exposes the organization to inter-institutional incompatibilities that makes the organization more aware of alternative solutions and practices (Greenwood & Suddaby, 2006). This can increase the spectrum of the organization's responses to institutional logics.

3.4.3 Identity

The role of identity in organizational responses to external forces is a relatively recent concept in the academic literature (Greenwood *et al.* , 2011). The identity can be witnessed in two levels, organizational and institutional. At the institutional level, the identity is about the membership in an institutionally standardized social category, or in other words, being part of the organizational field (Lounsbury & Glynn, 2001; Ravasi & Schultz, 2006). Identity at the institutional level has been seen to shape the way organizations respond to external forces, such as institutional complexity (Greenwood *et al.* , 2011). In addition to simply claiming a membership in a category, organizations can also present themselves in a way that is customary to the specific field (Negro *et al.* , 2010). This can be seen, for example, with companies who choose names that follow traditional practices in an industry (Glynn & Abzug, 2002).

At the organizational level, the identity is formed by attributes that differentiate the organization from other organizations (King *et al.* , 2010). Identity at the organizational level can affect the way the organization experiences and prioritizes external forces, and how the responses are selected (Glynn, 2008).

When organizational identity is used as a filter for organizational responses, the assessment should focus on how strong the organizational actors perceive the identity, and whether it is perceived negatively or positively (Greenwood *et al.* , 2011). The organizational actors may attempt to protect the identity of the organization when responding to institutional complexity. This can result in opposition or support of the institutional logics. A strong sense of organizational identity has been seen to encourage organizations to challenge institutional demands that are unfavorable for them (Gioia & Thomas, 1996).

3.5 Responses to Institutional Complexity

A study conducted by Greenwood *et al.* (2011), where data were collected from various comparative case studies, indicated that organizations can respond to institutional complexity through strategic actions or structural changes. When the organization is experiencing only one external demand, the logic introduced by this external demand will be embedded in the organization. However, when the organization faces multiple demands the response will depend on how the power is distributed between different intra-organizational communities (Pache & Santos, 2010a). Organizations are likely to transform the institutional rules so that they are aligned with their own strategies (Kraatz & Block, 2008)

3.5.1 Why Organizations Comply with Regulations?

The motivations to comply with regulations can be categorized as calculated, normative, or social reasons (Winter & May, 2001). Calculated motivations are the most commonly theorized causes for regulatory compliance, in which the regulated organizations comply with a given regulation if the benefits of compliance exceed the cost of compliance (Becker, 1974). The benefits can include the avoidance of sanctions. The role of the regulator, and enforcement of the regulations, is an important factor in the calculations, as the likelihood of being caught is largely based on the resources used for policing (Winter & May, 2001).

The normative motivations to comply with regulations are mostly based on whether the regulated organization agrees on the importance of the regulation and whether they have a high sense of moral duty (Winter & May, 2001). The legitimacy of the regulation has a significant role in the motivation to comply, and according to Tyler (1990), compliance with legitimate regulations also increase the legitimacy of the organization. In other words, compliance with regulations whose legitimacy is questionable may not be beneficial. In addition to the legitimacy, the reasonableness of the regulations and the fairness of the authorities affect the willingness to comply (Tyler, 1990).

Finally, the social motivations are based on the intent to gain respect from external parties (Grasmick & Bursik, 1990). The social and normative motivations may be very close to each other, and eventually social motivations may lead to normative motivations. The main difference is that an organization may want to earn approval from others even though its internal values would not require the organization to comply with a given regulation (Winter & May, 2001).

In addition to the willingness to comply, the organization needs to have the ability to comply. The ability is largely based on the awareness of regulations (Winter & May, 2001). Simply the knowledge of regulations is often not enough, but the organizations need to also understand the requirements of the regulations.

3.5.2 What Organizations Change?

When responding to changes in the environment, organizations can change in many different ways. This study looks into the changes of the main constructs: structure and maturity, field position, identity and business model.

3.5.2.1 Structure and Maturity

Structurally, organizations can cope with external demands in two primary ways, through blended and structurally differentiated hybrids (Simsek, 2009). Both of these refer to the way the organization combines the processes of exploitation and exploration. Blended hybrids attempt to include them in the same organizational unit, while structurally differentiated hybrids separate them into different units. In other words, blended hybrids are able to include different institutional practices into the same organization either by combining or layering them (Pache & Santos, 2010b). The structurally differentiated hybrids, on the other hand, separate the institutional practices into subunits, which is tightly aligned with compartmentalization strategy that is more related to the identity (Pratt & Foreman, 2000). The use of subunits is more common with bigger organizations, which can also be seen as its weakness, as it increases the complexity of the organizational structure and may result in highly conservative and fragmented organization (Greenwood *et al.* , 2011). This can have far-reaching consequences to the organizational identity, as the existence of other subunits can be a determining factor for the legitimacy of a subunit. This forms an institutional identity that can result in a struggle when trying to introduce reformations or new subunits (Suddaby & Greenwood, 2005).

3.5.2.2 Field Position

An important observation is that organizations keep changing constantly and can respond to institutional demands in iterative cycles (Greenwood *et al.* , 2011). Furthermore, an organization that first complies with an institutional demand may become non-compliant in the future (Tilcsik, 2010). Greenwood *et al.* (2011) suggest that also field position matters in the way organizations respond. For example smaller and younger organizations may fly under the radar, while organizations with higher status may be able to resist the institutional demands.

3.5.2.3 Identity

According to Kraatz and Block (2008) there are four ways, in which organizations can strategically respond to multiple institutional demands. Firstly, the organization could completely remove or weaken the parts of *identity* that associates them with the institutional demand. Second, the organization could increase co-operation between different identities, which could result in a balance between the institutional demands (Pratt & Foreman, 2000). Third, the organizations could strengthen their identities and become immune for external demands — in a way, become institutions in their own right. Finally, the organization could isolate identities through compartmentalization, and decouple their core identity from other logics that would be given only symbolic commitment (Pratt & Foreman, 2000). In addition, Greenwood *et al.* (2011) would add rhetorical framing of non-compliant structures in a way that they seem compliant to external parties.

3.5.2.4 Business Model

Another way of strategic response is the change of *business model*. Companies do not change business models only to pursue new opportunities, but also when an external factor creates the need for a change (Johnson *et al.* , 2008). The external factor can be, for example a shift in the competition, disruption in the field or a new technological innovation that alters the balance of demand and supply. Established organizations should not take business model changes lightly. There are both success stories and failures of organizations that have changed, or attempted to change, their business models (Johnson *et al.* , 2008). But when significant changes happen, the only way for a company to survive is often by changing its business model. When business model is changed, it can happen in many ways. An organization can simply change parts of its business model, for example shift, increase or refine the target customer segments, form new partnerships or build new delivery channels; or the organization may even have to build an entirely new business model (Johnson *et al.* , 2008).

In a study on 40 companies, Linder (2000) investigated how business models can be changed fast. The study found that the best way is to support multiple alternative business models. This can be achieved through company acquisitions or by deliberate experimentation. However, the harder part is to identify the best timing for a business model change and to implement the change without altering the structure of the organization (Linder, 2000).

3.5.3 How Organizations Change?

We can identify two major methods that can enable an organization to successfully respond to situations of institutional complexity: having distinct boundary spanners and buffering the institutional logic (Greenwood *et al.* , 2011).

Previous research indicates that organizations employ buffer strategy to obtain better results in the current dynamic organizational structures (Dobbin & Schoonhoven, 2010). In the buffering strategy, the organization decouples its structures from each other and operational activities and this way limits the effect of external parties in the organization (Meyer &

Rowan, 1977). According to Greenwood *et al.* (2011), buffering strategy has been widely recommended by various organizations due to the quality of the relationship that can be achieved between two different parties. The buffering strategy enables the organizations to be dynamic and proactive through prioritizing the achievement of more critical goals (Meyer & Rowan, 1977). Additionally, the strategy promotes collaboration, lays emphasis on skills and capabilities, and minimizes incomprehension (Westwood *et al.* , 2014). In other words, the organizations that are capable of working as 'buffers' between two different logics are able to promote diversity, increase the organizations output and facilitates better feedback, thus making the stakeholders more satisfied and pleased (International Economic Association. *et al.* , 2008).

Employment of boundary spanners is significant in tackling issues of institutional complexity. Successful organizations usually employ qualified personnel with the aim of enhancing smooth running of the operations as well as facilitating feedback during communication between different parties in the organization. Specifically, Greenwood *et al.* (2011) endorse that people who play a critical role in the decision making process should have a great wealth of experience in terms of the research projects, academia, as well as industrial experience. For instance, persons who have PhDs are able to act as decisive 'boundary spanners' between the university and the corporate world (Greenwood *et al.* , 2011). A combination of education, experience and specific competences allows one to effectively manage the relationships between the organization and various stakeholders (Meyer & Rowan, 1977). Thus, having experienced personnel enables the organization to avoid potential errors. Therefore, while trying to manage the institutional complexities, the boundary spanners seek to bridge existing gaps between the organizations and the society (Dobbin & Schoonhoven, 2010). Additionally, the strategy tries to minimize the frictions and incomprehension between the management of various organizations (Dobbin & Schoonhoven, 2010).

3.6 Conclusion

This chapter reviewed the existing literature on institutional complexity, business models, and organizational changes. Based on the literature review, there is a need to better understand the experience of complexities as well as formal and informal demands upon organization. In addition, a literature gap was identified in how organizations experience complexity at different stages of maturity. The maturity of an organization can be reflected from its structural attributes, degree of legitimacy, and degree of centralization in the field. In the payment service industry, especially the type of licenses the company possesses provides a good indication of how central the company is in the field.

Building on the work of Greenwood *et al.* (2011), I suggest a theoretical model, where the institutional complexity is filtered through the organizational attributes — structure, maturity, field position, and identity — and addressed by changes in the business model of the organization.

The relationship between institutional complexity and business models has not been studied much. During the literature search, only a couple of papers addressing both institutional complexity and business models were found, all published after 2000 (de Reuver *et al.* , 2009; George & Bock, 2011; Pateli & Giaglis, 2005; Petrovic *et al.* , 2001; Schweizer, 2005). Business models reflect the operational environments of the organizations, and a link between business models and institutional complexity seems evident. Thus, it is important to learn more on how the two constructs are related.

Based on the literature review, the research questions of this study have been formed as follows.

1. How the maturity, field position and identity of an organization in the payment service industry affect its experience of institutional complexity?

2. How do organizations with different stages of maturity, field position and identity plan to change their business models in response to the Payment Services Directive II?

Chapter 4

Methods

4.1 Introduction

This chapter presents the research methods used in the study. First, Section 4.2 states the research problem and questions. Section 4.3 presents how the literature study was conducted. Next, the research method to answer the question is presented in Section 4.4. Section 4.5 explains how the case companies were selected, and finally Section 4.6 present how the data was collected, and Section 4.7 explains the data analysis.

4.2 Research Questions

In the literature review, the experience of institutional complexity was identified as a knowledge gap in the current literature. The current situation of payment service industry makes it very suitable for studying the experience of complexity. The ongoing change in the regulation is opening new opportunities for third party service providers and creating new demands for the existing organizations. The regulatory changes also anticipate significant structural changes in the field. Thus, the research questions in this study have been formed as follows:

1. How the maturity, field position and identity of an organization in the payment service industry affect its experience of institutional complexity?
2. How do organizations with different stages of maturity, field position and identity plan to change their business models in response to the Payment Services Directive II?

The research attempts to answer the questions in the context of payment services, having focus especially on the Payment Service Directive II.

4.3 Literature Study

The literature study was conducted before the case studies, aimed at forming a comprehensive description of the background of the situation, and defining the research constructs as well as the gap in current knowledge. First, I reviewed documents on payment service regulations — especially in the EU — and studied research articles from academic journals related to payment services, regulations, industry networks and third party service providers. At the first stage, all interesting leads were followed, and there was no clear time frame for limiting the literature. The intention of the first part of the literature study was to identify relevant theories that are related to the subject. Later in the literature study the focus shifted to conducting further studies on the theories identified during the first part. Institutional theories were commonly referred to in the reviewed literature, and thus institutional complexity was identified as a common macro level theory.

During the later part, the search for literature was more structured and focused on institutional theories, institutional complexity, organizational responses and business models. The searches were mainly conducted on Google Scholar and JSTOR, focusing on more recent literature from 1990s and 2000s.

4.4 Case Studies

The research design is a multiple-case, inductive study. Multiple case studies can be seen as series of repeated experiments that support or reject an emerging theory (Eisenhardt & Graebner, 2007).

A case study is an in-depth study about an individual, organization or a group of people. It isolates groups or organizations from the rest for a thorough study. Case studies are used in many situations to study individuals, groups or organizations, and have been a commonly used research method in many social sciences and business studies (Yin, 1994). Case studies are most useful for studying a new field or theory, when exploring the key variables and their relationships (Gibbert *et al.* , 2008). According to Amabile *et al.* (2001) case studies are ideal for creating managerially relevant knowledge.

Case study is a preferred strategy especially when the nature of the research questions is more explanatory — in other words, the questions ask 'how' and 'why' — and the focus of the study is on contemporary events (Yin, 1994). Yin (1994, p. 13) describe that case study "copes with the technically distinctive situation in which there will be many more variables of interest than data points". According to Yin (1994), case study is empirical research that sees phenomena within their context, especially when they are not clearly distinguishable from the context. While case studies often use quantitative data, a key characteristic is that case studies focus on phenomena in their contexts (Gibbert *et al.* , 2008).

Case study is an important aspect in business as it enables companies to know the weaknesses and advantages of different strategies and choose the best (Milosevic *et al.* , 2013). Businesses are also in a position to learn from rivals who are already doing well.

Case study enables one to explore and apply the knowledge gained as it is developed in a real world situation. It is, therefore, not based on only ideal conditions but what is realistic. It also enables the collection of detailed data giving the focus on individuals and organizations (Milosevic *et al.* , 2013). This allows thorough examination of the subject under discussion. Case study also provides firsthand information that has not been fabricated or falsified. The application of multi-data gathering techniques like questionnaires, observation and interviews yield rich data that gives direction for further study.

4.5 Sampling

Six companies operating in the payment service industry, and based in Finland, were chosen as the sample for this study. The companies have been disguised with names of dwarves from fictional world of Middle-earth created by J.R.R Tolkien (e.g., Thorin). The sample includes three payment institutions (Bifur, Gamil, Dwalin) and three so-called third party payment providers (Thorin, Frerin, Bombur).

The sample size is an important question when doing a research. In quantitative studies the optimal sample size can be quite easily calculated from the population size with desired error margins. In case studies, the nature of the research is more qualitative, which brings challenges in the sampling. Case studies can be a good starting point for developing new theories, and a widely cited paper by Eisenhardt (1989) suggest that an analysis of four to 10 case studies can provide a good basis for this type of analytical generalization.

Case study employs theoretical sampling that gives the researcher a mandate to choose individuals or organizations to include in the study based on their ability to provide the needed information. There are several varieties of purposive sampling that can be used in case studies (Milosevic *et al.* , 2013).

The chosen research questions include the attributes of the studied organization as a primary independent variable. Therefore, it was important to have companies with different characteristics in the sample, regarding their structure, maturity, field position and identity. Being a timely topic, payment service industry was chosen as the general context to control for the number of and types of complexities that the companies face. To further limit and control the sample, all the companies were chosen to be based in Finland but operate also internationally. Due to the number of suitable companies in Finland and the limited resources, six companies was chosen as the target number of case studies. A theoretical sample was built, having three companies from two different categories — based on maturity, position and identity — giving an opportunity to carry out comparative analysis.

4.6 Data Collection

The primary source of information was interviews with company representatives. In order to improve the reliability, the goal was to interview two or three representatives from each company separately. Eventually, only two representatives were interviewed from each company. A total of 12 interviews were conducted, each lasting 45-60 minutes. The interviews were semi-structured, following a template in Appendix A. In addition, secondary sources (e.g. public documents, news articles, press releases, industry white papers, annual reports and documents provided directly by the companies) were used.

Information bias was mitigated by interviewing multiple representatives from each company and also including secondary data to triangulate the observations. An interview guideline was followed, asking the interviewees to provide practical examples from company operations to support their views and observations. In addition, confidentiality was promised for the participating companies in order to obtain accurate data.

4.7 Data Analysis

The data was analyzed with interpretive techniques by first identifying the attribute of organizations: field position, structure, identity, and business model (mainly value proposition, customer segments, delivery channels and partners). Next, the actions of the companies were analyzed in the context of how they help in managing and responding to institutional complexity. Various tables were produced, aggregating and transforming the data of the companies into comparable form.

The organizational identities were measured mainly through field position and structural characteristics. At the institutional level, the organizational identity is determined as a membership in a specific industry or field (Lounsbury & Glynn, 2001; Ravasi & Schultz, 2006). At the organizational level, the identity is determined with difference to other organizations (King *et al.* , 2010).

As identified in the literature review, the institutional complexity can be seen as different demands created by various external entities or institutions. These demands can be formal or informal. The case studies intended to identify the stakeholders that create demands to the studied companies. The overall experience of complexity was analyzed based on how the companies address the demands from different stakeholders. In addition, the case studies looked into how the companies manage the demands and how the companies track and response to the changes in the demands. The Payment Services Directive II was studied as a specific case example. The interview questionnaire included questions related to how the company has been addressing the PSD II with specific actions and responses.

4.8 Conclusion

The study consists of two main parts, a literature study and a multiple case study. The literature study aims at forming a comprehensive view on the background and existing literature on the topic. An inductive case study was conducted on six companies, selected with theoretical sampling. The aim of the case studies was to apply the theories in practice and take a more pragmatic approach to answering the research questions. The primary source of data was interviews with company representatives, and the data was analyzed with qualitative methods.

Chapter 5

Results

5.1 Introduction

This chapter presents the results of the case studies. First, Section 5.2 shortly introduces the case companies. After that, Section 5.3 evaluates the characteristics of the different case companies in a cross-case comparison. The section also addresses the way organizations experience institutional complexity and are likely to respond to the PSD II.

5.2 Case Studies

This section shortly introduces the case companies. The company structures and maturities are evaluated, as well as their field positions and business models.

5.2.1 Case A: Bifur

Bifur is a payment institution with fewer than 30 employees. The company was founded in 2011 and it provides payment account services and related business management tools for businesses and consumers. The company has a flat organizational structure and identifies itself as a prominent innovator in the field. With the payment institution license, the company is clearly a member of the industry. The company distinguishes itself from other companies by its modern and innovative technologies.

The company has received funding from venture capital investors and its business model has been mainly the same since the beginning. The company is not very central, but still clearly inside the field. The services that the company provides are more at the value added side but the company is still operating quite strongly on the core services in the field.

5.2.2 Case B: Gamil

Gamil is a payment institution with more than 50 employees. The company was founded in 2011 and it offers payment account services and payment instruments (debit cards). The company is an independent business unit in a rather mature large corporation, originally established as a spin-off. The company is attempting to be agile but due to a close relationship with the parent company, the organizational structures are clearly on the heavier side. The company identity is a mixture of a well-established corporation and an agile innovator. The company does not consider itself as a core player in the industry. The company thinks that it can bring modern technologies to the market faster than its competitors.

In general, the business model of the company has not changed much since the firm's conception. The company has introduced some new products and services with new business models. The company is quite central in the field, although not at the very core. The services that the company offers are also quite core services with little value added features. Operationally, the company still requires partnerships with other core players in the industry to process payment transactions.

5.2.3 Case C: Dwalin

Dwalin is payment institution with more than 50 employees. The company was founded in 2007 and it offers on-line payment accounts as well as online payment acquiring and processing for business customers. In the recent years, the company has been growing fast and the structures have been getting heavier. The company does not see itself as a very core player in the industry but is attempting to become one. Nevertheless, the company is clearly a strong member of the field. The company thinks that its competitive advantage is the ease of use as it brings several payment methods under the same service.

The business model of the company has been quite stable for a several years, with some experimentation. The company is a quite central player in the field. The company offers clearly value added services and operates in partnership with multiple core service providers.

5.2.4 Case D: Thorin

Thorin is a one-year-old third party provider with fewer than 10 employees. The company was founded in 2014 and it has built a mobile payment and ordering system for brick-and-mortar businesses that serve consumers. The company offers its products directly to both businesses and consumers with its own brand. Due to a small team, the company structure is very flat. The company identifies itself as a somewhat outsider in the industry but externally it is trying to appear as a well-established player in the field. The company sees that it offers a modern and user-friendly replacement to existing products in the market. The company has received funding from venture capital investors.

Being a young company, the business model is still partly under development, but the main customer segments and value propositions are very well defined. The company operates in partnership with a licensed payment service provider. Technically the company is in the periphery of the field but operationally the company is trying to appear as a strong member of the industry. The services that the company offers are clearly value added but intend to substitute core services from the end users' viewpoint.

5.2.5 Case E: Frerin

Frerin is a one-year-old third party provider with fewer than 10 employees. The company was founded in 2014 and it offers mobile payment solution for brick-and-mortar businesses. The company offers its products directly to both businesses and consumers with some gray label branding. The company structures are very flat as the team is small. The company identifies itself as an outsider in the industry, but has a strong intention to become a member. The company distinguishes itself from other with its modern solutions to an old industry.

As a young startup, the company is still developing its business model, but the higher level parts are well defined. The company is located in the periphery of the field, operating in partnership with a licensed payment service provider. The services that the company offers are partly substituting existing core services.

5.2.6 Case F: Bombur

Bombur is a one-year-old third party provider with a couple of employees. The company was founded in 2014 and it is offering an on-line payment system for businesses. The company is very small and agile, and also identifies itself as such. The company is not planning to become more central in the field, but does not entirely rule out the possibility, as it would provide more control over the cost structures. The company sees itself as the first to modernize old ways of doing things.

The company has a very clear business model, but it is exploring new opportunities. The company is in the periphery of the field, and provides payment services through a payment acquiring partner. The services are clearly value added.

5.3 Cross-Case Analysis

This section analyses the structure and maturity, field position, identity and business model of the case companies in a comparative manner. In addition, the experience of institutional complexity and possible responses to the PSD II are assessed for each company.

5.3.1 Structure and Maturity

Structurally the third party providers in the sample are very similar to each other, while the payment institutions vary a lot more from one another. All of the third party providers are small with very flat organizational structures. The payment institutions have all tens of employees but their structures vary more. Bifur and Dwalin are the most similar payment institutions with a couple of separate teams but Gamil has even more complex structures being a subunit of a larger corporation. The maturity follows similar patterns. All of the third party providers can be considered very young, and their degree of maturity is low. The payment institutions have significantly higher maturity but again Gamil seems more mature than Bifur and Dwalin. This might be explained by Gamil being a spin-off of a much more mature company.

5.3.2 Field Position

The services that the sample companies provide vary from semi-core to value-added. The most core services are offered by Gamil, while Bifur and Dwalin are quite similar. All of the third party providers are clearly on the value-added end, with Thorin and Frerin being slightly more core than Bombur. The field positions of the sample companies have been visualized in Figure 5.1 in relation of service type and target segment. The target segments, on the other hand, vary on a broader scale within the two groups. The third party providers have narrower target segments, while the payment institutions have broader segments. It is clear that the more core services the company provides, the broader its target segment also is.

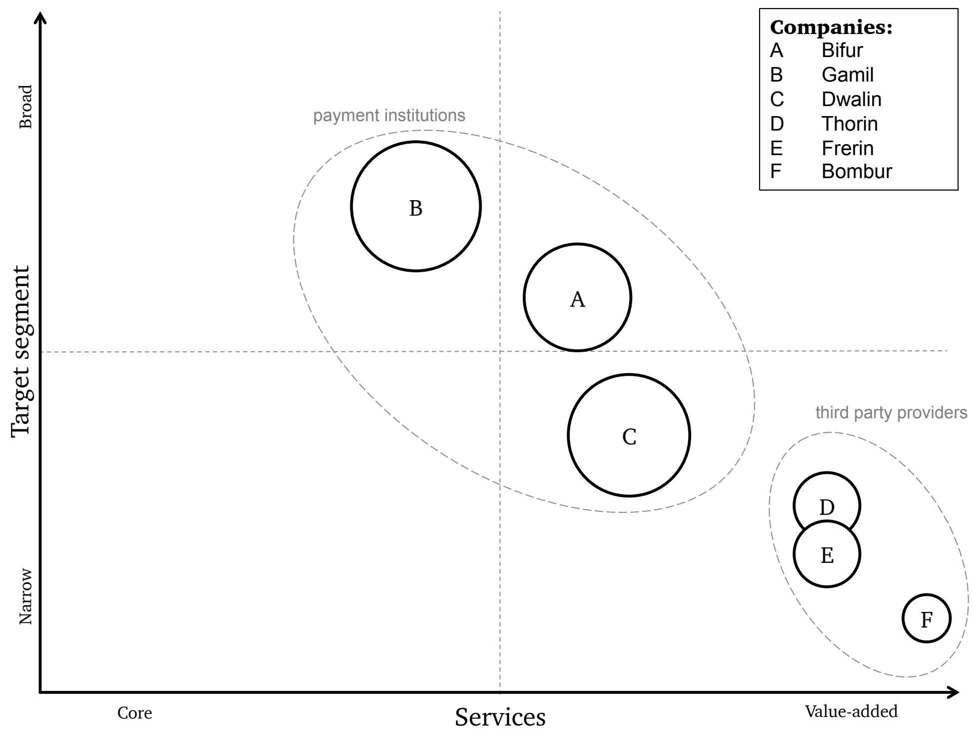

Figure 5.1: The positions of the sample companies. Source: The author

5.3.3 Identity

The sample includes clearly two types of companies. The payment institutions identify themselves as quite central in the field but none of them is a very core player. There is some variety with the service offerings. Two of the companies, Bifur and Dwalin, provide clearly more value added services while Gamil provides more traditional core services. Each of the payment institutions still require partnerships with even more central players, in order to operate seamlessly. All of the third party providers, on the other hand, are clearly in the periphery of the field. However, two of the companies, Thorin and Frerin, are clearly intending to become more central and stronger members of the field.

Structurally the payment institutions are clearly heavier than the third party providers, although Bifur still has a flatter structure. All of the payment institutions see that their services are substitutes for the core services in the field, but they bring more value with modern technologies and ease of use. The third party providers, on the other hand, are all quite small with very flat structures. All of them are also offering more value added services, but they too require a partnership with a more core service provider. The third party providers all identify themselves as completely new entrants who are attempting to bring radical innovations to the field in a user-friendly way.

5.3.4 Business Model

In terms of business models, all of the companies are quite similar to each other. The company business models are presented in Table 5.1. Vague descriptions are used to preserve the anonymity of the companies. All of the companies provide their service through some sort of online delivery channel. Three of the companies also focus on mobile delivery channels, which is the primary channel for Thorin and Frerin. Only one of the third party providers, Bambur, does not use mobile as a delivery channel, while two of the payment institutions, Bifur and Dwalin, focus less on mobile.

All of the companies target both business and consumer customers but for some companies the target segment is more refined. With all of the third party provider the customer segments form a two-sided market, where the company needs to form a relationship with both parties. The three payment institutions can provide services for businesses and consumers more or less independently from each other.

Table 5.1: Case Company Business Models

Value proposition	Customer segments	Delivery channels	Partner networks
Case A: Bifur			
Save time for customer with more user-friendly solutions.	Businesses and consumers.	Online	A couple of key partners providing more core services in the field. Providing services to some more value-added partners.
Case B: Gamil			
Make payments easier and more securely.	Businesses and consumers.	Online and Mobile	One key partner providing more core services in the field. Providing services to some more value-added partners.
Case C: Dwalin			
Making payments easier.	Online businesses and consumers.	Online	A couple of key partners providing more core services in the field. Providing services to some more value-added partners.
Case D: Thorin			
Save time for customer with more user-friendly solutions.	Brick-and-mortar businesses serving consumers.	Mobile (Online)	One key partner providing more core services in the field.
Case E: Frerin			
Save time for customer with more user-friendly solutions.	Brick-and-mortar businesses serving consumers.	Mobile (Online)	One key partner providing more core services in the field.
Case F: Bombur			
Increase efficiency of businesses and save time for consumers.	Businesses and consumers.	Online	A couple of key partners providing more core services in the field.

All of the companies operate with one or a few key partners. A clear difference between the payment institutions and third party providers is that the payment institutions provide some services to more value-added partners. This happens mainly through the use of application programming interfaces (APIs). For all of the payment institutions, the APIs are considered as one of their key products.

In terms of value propositions, the companies are generally promising to provide easier solutions than the existing ones, and to save the customers' time. It seems quite common that the payment service industry is considered antique, and everyone is trying to modernize it.

Nevertheless, only few of the companies are building fundamentally new types of products that can function independently regardless of the core payment systems in the industry.

5.3.5 Experience of Institutional Complexity

The organizational identity and other characteristics seem to affect significantly how the organization experiences institutional complexity. All of the companies have a more or less neutral attitude towards regulations. In general, all companies understand that regulations are there for a reason, but the opinions about the existing regulations are rather negative. The ongoing and future changes, however, have raised expectations for a more positive future. The way the sample companies experience institutional complexity has been summarized in Table 5.2.

The difference between the payment institutions and third party providers can be seen especially in regard to the level of detail of regulations. The negativity that payment institutions experience is attributed mainly to the several small details and demands that the companies are subject to. With the smaller third party providers, on the other hand, the negative opinions are felt to stem from the overall difficulty and friction in the industry, and they are not able to name any specific factors that would cause the negativity.

The positive opinions that the companies have on regulation are mostly related to their development. All of the interviewed companies think that the PSD II has the potential to improve the situation, although it is not certain. Even though there is a clear experience of fairness — that is the regulations are perceived to be the same for everyone — the smaller third party providers think that the regulations in payment services are easier for bigger companies to comply with. On the other hand, the payment institutions see that things are actually easier for the smaller companies, who can 'fly under the radar' and avoid compliance with many rules up to a certain point.

Table 5.2: Case Company Experiences of Institutional Complexity

General attitude towards regulations	Experience and procedures in managing complexity
Case A: Bifur	
The company sees regulations mostly in a positive light, although not trouble-free. The main point, according to the company, is that the regulations are the same for everyone and in general protect the customers and guide the service providers to do the right things. In other words, the regulations make clear for everyone, what can or cannot be done.	The company has rather structured processes for documenting different external demands and following their changes. The company has also allocated resources for compliance and regulatory work.
Case B: Gamil	
In general, the company has a neutral attitude towards regulations but with some details the experience is quite negative. The company feels that the atmosphere in regulatory development has been very bad. The changes often try to improve things but end up bringing more detailed requirements and complexities.	The company has very formal and structured processes for following the changes in regulations, contracts and other demands. The company is including upcoming regulations actively in its strategic planning. This is a result of an experienced team and being closely connected to the bigger parent company.
Case C: Dwalin	
The company thinks that the regulations in the payment services industry are not good but the recent and upcoming development has been mostly positive.	The company has very well developed processes for compliance management. The company has allocated several persons to compliance. The demands and their changes from partners and regulations are followed on a regular basis and the information is used in strategic planning.
Case D: Thorin	
The company has a rather negative attitude towards regulations and is trying to avoid the need to comply. The company sees that regulations benefit bigger companies.	The company has not implemented any formal processes for following the changes in the regulations. However, the company has been discussing extensively with industry experts and lawyers about the payment services regulations and different options. In other words, the team is bringing the experience from outside.
Case E: Frerin	
The company has rather neutral attitude towards regulations. The company sees that the regulations are there for a reason and with good intentions. The company is avoiding the need to comply with payment services regulations in the beginning by using a payment processing partner and operating contractually as a reseller.	The company does not have any formal or structured processes for following the regulations. The company has only a few contracts with partners and has not allocated any specific resources on managing these requirements.
Case F: Bombur	
The company is avoiding the need to comply with payment services regulations due to small volumes and operating contractually as a reseller. The company sees that it would take too many resources to become a payment service provider themselves.	The company does not have any formal or structural processes for following the regulations or other external requirements.

In terms of processes and practices, the difference between the payment institutions and third party providers becomes even clearer. All of the payment institutions have quite heavily structured processes for tracking external demands and include them in their operations and strategic planning. Each payment institution has also allocated resources to compliance work. The third party providers, on the contrary, have not done much in terms of regulatory compliance. With third party providers, the previous experience of the team seems to have some effect, as Thorin clearly stood out with its professional attitude towards regulations. Thorin was the only third party provider in the sample who had already carried out preliminary due diligence on the payment service regulations with experts and lawyers.

5.3.6 Responses to the PSD II

According to Peng (2003) an industry that is undergoing a regulatory change can demonstrate wide-ranging inertia. However, this seems not to be the case in regards to the payment service industry. The responses to the PSD II among the sample companies show a clear difference between payment institutions and third party providers. Already two of the payment institutions, Gamil and Dwalin, have started to include the PSD II into their strategic planning. Also the third payment institution, Bifur, has performed an initial review on the regulation. However, none of the third party providers has taken any practical actions regarding the PSD II. Only one of them, Thorin, has talked about it with industry experts and lawyers. The responses to the PSD II of the sample companies have been summarized in Table 5.3.

In general, the expectations for the PSD II are quite hopeful from all of the sample companies. However, especially two of the payment institutions, Gamil and Dwalin, have a bit negative opinions on the current version of the PSD II. All of the companies think that the new directive could increase innovation and make it possible to develop new

Table 5.3: Likely Responses to PSD II by the Case Companies

Action taken so far	Opinions about PSD II	Possible responses to PSD II
Case A: Bifur		
The company has not taken any practical actions regarding the PSD II. However, the PSD II has been acknowledged and an initial review has been performed.	The company sees that the PSD II should bring clarity to the industry structures and open up new partnership and integration possibilities.	The company feels that it is in a good position to respond to the upcoming changes, being a young company with modern and simple, yet advanced technological solutions. The company is likely increasing its collaboration with third party providers while keeping its position firmly with also core services.
Case B: Gamil		
The company has already started to include the PSD II into its strategic planning, which can be seen also in the amount of communications and internal documents related to the PSD II.	The company sees that the PSD II could bring new innovations and decrease some costs but on the other hand, tightens many requirements that will increase costs. The general opinion is somewhat negative but hopeful.	The company sees that the PSD II can allow it to become a more core player in the industry, increase its transaction volumes, profit margins and help introduce new products.
Case C: Dwalin		
The company has started to include PSD II into its strategic planning, and has several internal documents about the PSD II.	The company is very well aware of the PSD II, and thinks that its intention is positive but in practice it makes many things for the company harder. According to the company, the PSD II can increase innovation in the payment services industry and help especially small companies and new entrants. For existing companies the PSD II is a threat and they need to be able to react fast.	The company sees that PSD II could make it possible to become a more core player and increase collaboration with other payment service providers.
Case D: Thorin		
The company has been talking about the PSD II with industry experts and lawyers, although no practical actions have been taken. The company had not yet allocated any resources for regulatory compliance.	The company sees the PSD II as a positive initiative that is likely to support its own growth strategy. The company believes that the PSD II will facilitate collaborations with other companies in the industry.	The company believes that the PSD II can improve the possibilities for expansion, making it easier to operate as a third party provider.
Case E: Frerin		
The company has not taken any practical actions about the PSD II.	The company sees that the PSD II can make things easier and clarify the market.	The company thinks that it could potentially operate as a third party service provider, which could decrease its payment processing costs.
Case F: Bombur		
The company has not taken any practical actions about the PSD II.	The company is not very well aware of the PSD II but in general sees that it can bring positive changes to the industry.	The company will most likely not respond to the PSD II in any practical way but it is keeping its options open.

kinds of services. However, the bigger companies, Gamil and Dwalin, see it more clearly as a threat while the smaller companies see it as an opportunity. Nevertheless, a common opinion is that the directive should definitely bring more clarity to the industry.

The likely responses of the companies are quite similar within the two groups. The payment institutions see that the PSD II would make it possible for them to become more core players in the industry, and to provide new types of services themselves and in collaboration with third party providers. The third party providers, on the other hand, see that the directive would make it possible for them to collaborate more with the core service providers in order to offer new types of services.

The current positions of the companies and their likely future responses, in terms of provided services and target segment, have been visualized in Figure 5.2. It is easy to notice how the payment institutions are all planning to move towards top left — providing core services to a broader customer segment — and third party providers are all planning to move towards top — staying with value added services but broadening their customer segments. In other words, it appears that the PSD II is very likely causing a shift in the company strategies. The third party providers will attempt to take a stronger position as providers of the value added services, while the payment institutions are shifting towards core services, challenging banks as the foundation of the industry.

5.4 Conclusion

The sample companies have both similarities and differences. The difference between payment institutions and third party providers are clearly distinguishable but there are also differences inside the two groups. The experience of institutional complexity is in general the same but arises from different factors. The payment institutions focus more on the details, while third party providers find it harder to see the big picture.

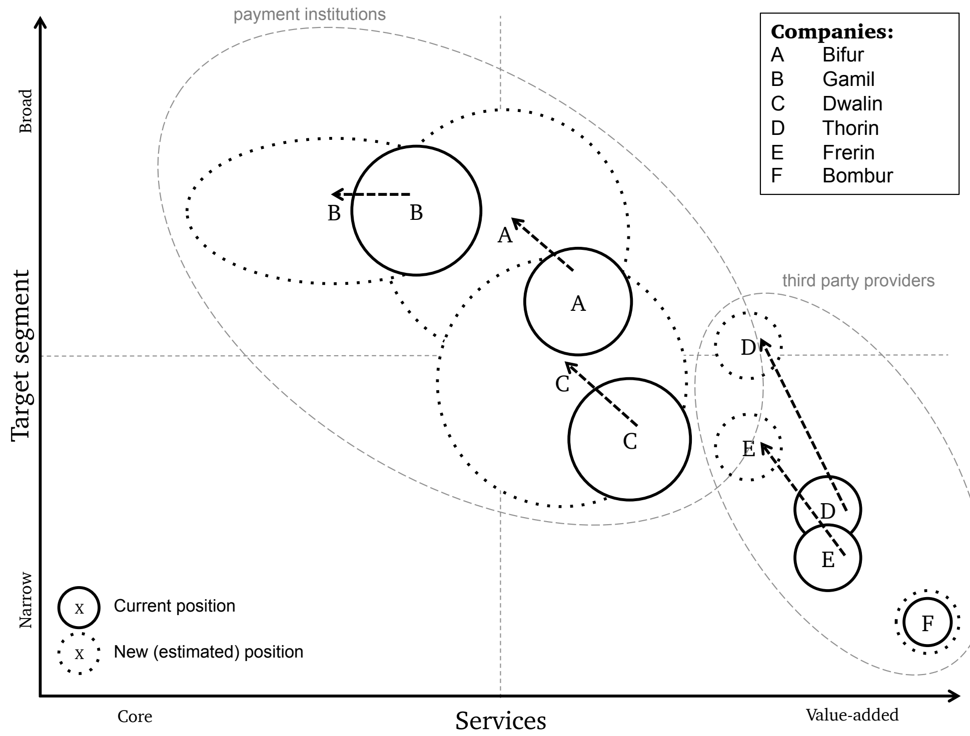

Figure 5.2: The current and likely future positions of the sample companies. Source: The author

The likely responses to the PSD II are mostly similar within the two groups but some small differing views surfaced.

Chapter 6

Discussion and Conclusions

6.1 Introduction

The payments and banking industry has been traditionally associated with heavy regulation and institutional inertia. However, the technological development, rapid growth of Internet services and demand for new types of solutions has placed the industry in a situation that anticipates revolutionary changes. Innovative businesses have been constantly looking for loopholes in the system to enable them to provide services easier to the end users by avoiding the need for demanding regulatory compliance. This has led the industry into a race with the regulators, both in positive and negative spirits. In the European Union, a series of directives have been formed to address the needs of the payment service companies and also considering the protection of the end users. The upcoming Payment Services Directive II is going to bring about a set of new regulations, this time including a new category of third party service providers into its scope.

This institutional setting provides a suitable opportunity for studying institutional complexity. This study analyzed the impact of the PSD II in the payment service industry, and through that, looked into how different types of organizations experience and manage institutional complexity. On one hand, the payment institutions that are quite central in the field may see the new directive as a threat. On the other hand, the third party providers who are gaining more opportunities through the new directive may be able to properly enter the market.

Especially the experience of institutional complexity was identified as a gap in the existing literature. Thus, a multiple case study was conducted with a total of six companies. Half of the companies were payment institutions and the other half third party providers. The study aimed to explore the impact of the PSD II in terms of the business models of these case companies.

6.2 Findings

The **first research question** asked, how organizations with different maturity, field position and identity experience complexity. A couple of observations can be made from the findings of this study. First, it is clear that the payment institutions, as bigger organizations, and the third party providers, as smaller organizations, experience complexity quite differently.

Both the payment institutions and the third party providers had generally negative opinions towards regulations. However, the reasons behind this experience seemed to vary. All of the payment institutions had formed processes and structures that helped them manage the complexity of external demands with fewer difficulties, even though the size and age of the companies varied. In general, the payment institutions had a healthy attitude with regulations, and the negativity was caused by the amount of small details in the requirements. The third party providers, on the other hand, seemed to be overwhelmed by the various external demands and therefore struggled to construct a comprehensive picture of the situation.

All of the payment institutions are members of the field and must comply with its rules and regulations. It appears that the need to comply with regulations requires so much effort that a company has to grow. The growth makes it more practical to formalize and automate processes. Automated compliance processes, on the other hand, could have a significant effect on how the organization experiences external demands and complexities.

Similar to the findings of Greenwood and Hinings (1996), bigger and more complex organizations seem to experience more institutional complexity. However, as previous literature attributes this to a complex nature of the organization itself — that is the bigger an organization is, the more actors with contradictory views are part of the decision-making processes — this study brings forth the question if the need to manage external institutional complexity in fact requires the organization to increase its internal complexity by growing its resources. The need for an organization to comply could demand so much effort that it must grow bigger.

Westwood *et al.* (2014) concluded that complexities result from the modernization of societies, as the organizational networks become bigger and more complex. This is especially the case with the PSD II, as it adds more layers to the field. Thus, both the growth of organizations and the networks they operate in could add to the institutional complexity of the payment service industry.

The more mature organizations seem to accept institutional complexity better whereas younger organizations try to avoid the need to comply. As suggested by Greenwood *et al.* (2011) the younger organizations may be able to 'fly under the radar'.

The field position and identity of the organizations reflect mainly the categorization of the two groups as payment institutions and third party providers. The payment institutions are relatively central in the field while the third party providers are at the periphery. Correspondingly, the payment institutions identify themselves as clear members of the field while the third party providers are more as outsiders. The main difference within the third party providers was that one of the companies, Bombur, was not particularly interested in even entering the field while the other two companies were very more much interested in that option.

According to Leblebici *et al.* (1991), organizations located at the periphery of organizational fields are affected less by institutional complexity. This is in accordance with the results of this study. The third party providers have not taken any particular actions regarding the PSD II. It remains to be seen, whether this inaction is a result of inertia as suggested by Peng (2003) or simply the final state of things. Ingram (1998) suggested that central organizations see change as a threat and are likely to be resistant to it. However, all of the more central payment institutions interviewed in this study see the changes in a more positive and supportive manner. In the end, it is difficult to draw clear conclusions based on this study on how the field position influences the institutional complexity. Though, the organizations inside the field cannot escape the complexity and are therefore forced to experience it while the organizations at the periphery are able to avoid the complexity.

In terms of the identity, only one clear observation can be made from the results of the study. One of the third party providers, Bombur, did not identify itself as a member of the field and did not plan to enter it. As suggested by Glynn (2008), identity at the organizational level can affect the way the organization experiences and prioritizes external forces, and how the responses are selected. Thus, it seems that not identifying itself as a clear member of a field can make an organization give less priority to it.

The **second research question** asked, how organizations with different stages of maturity, field position and identity change their business models in response to the Payment Services Directive II. The responses go very well hand in hand with the experience and management of institutional complexity. The payment institutions believe that they can become more central in the field. They already have formal processes and they could become more central by continuing with their current practices without significant development efforts. The third party providers, on the other hand, do not have very formal processes and are not particularly interested in developing them. Thus, the third party providers see that they could expand their services and scope without becoming more central in the field. It seems that the organizations would respond without significantly changing their attributes. Instead, they would change their field position and business model in a way that their other attributes better fit the new environment. Going back to the literature review, organizations may attempt to protect their identity, and thus keep their characteristics unchanged (Greenwood *et al.* , 2011).

A hypothesis that was formed based on the study predicts that the two groups of companies are likely to respond differently to the PSD II. The payment institutions are planning to expand their scope and become more central in the field. The third party providers, on the other hand, are mainly interested in broadening their target segments but keep operating as third party providers. In other words, the PSD II enables the payment institutions to obtain a stronger hold of the core payment services, while making it easier to provide those services to the third party providers. In a way, the payment institutions would be able to outsource some of their functions to the third party providers.

According to Johnson *et al.* (2008), a company can change its business model by shifting, increasing or refining the target customer segments, forming new partnerships or building new delivery channels. In addition, Cavalcante *et al.* (2011) suggested that organizations try to avoid significant changes in business models, as these could question the existing models and processes of the organization and its management. Both of these are in line with the findings of this study. All of the companies were planning to do mainly minor changes in their business models by shifting the target customer segments and operational position in the field. Many companies also indicated an interest in developing new types of services, although they did not have any concrete plans yet. This finding is also supported by an observation that regulations are not the most important drivers for business model changes (de Reuver *et al.* , 2009).

The incorporation of boundary spanner and buffering institutional logics, as described by Greenwood *et al.* (2011), did not rise up in the interviews with the companies in the study. However, the previous experience of the founders did get some attention especially with the third party providers. Experienced and skilled entrepreneurs could work as boundary spanners and in that way significantly contribute to the success of a new entrant in the field.

To summarize, this study found that the structure and maturity of an organization has a significant impact on how the organization experiences and manages institutional complexity. First, structure and maturity go very much hand in hand. The more mature an organization is, the more developed practices it has for coping with external demands. The more mature organizations can better see the big picture and are therefore able to focus also on very small details of the external demands. Less mature organizations, on the other hand, have difficulties seeing past the big picture. They are overwhelmed by the complexity and struggle to take any practical actions amidst the external demands. There is also a clear demonstration that the more mature payment institutions are likely to respond to the PSD II by becoming more central in the field while the third party providers stay at the periphery and only increase the scope of their target customer segments. However, the business model changes are expected to be quite minor adjustments.

6.3 Academic Contribution

The literature in this thesis drew on two primary theories, institutional complexity and business models. The main contribution of this study is the observation that institutional complexity and business models are related. This is a significant concept that has not received too much attention in academic literature.

Most of the existing literature on institutional complexity focus on the sources of complexity as well as on how organizations respond to complexities. Linking business model to the framework introduced by Greenwood *et al.* (2011) (see Figure 3.2) brings a broad spectrum of new perspectives to the institutional complexity literature. As pointed out by de Reuver *et al.* (2009) regulations are not the most important drivers for business model changes. Even though the PSD II itself will not necessarily force business model changes, the introduction of the third party providers can alter the field dynamics and market forces and create a demand for business model changes. Thus, the regulatory changes, or changes in institutional complexity, may function as an independent variable resulting in business model changes through market forces as an intermediary variable.

Business model is effectively a template that describes how an organization operates when creating, capturing and delivering value. By linking business model to the larger context of institutional complexity, it becomes evident that business model mirrors many aspects of the institutional environment the company operates in.

The business model literature is still very fragmented. However, an important notion is that business models are interlined with multiple concepts from organizational, strategic management and business theories. The nature of business models becomes clearer when looking through the perspectives of, for example, systems thinking or complex systems theories. A lot more research should be done on how business models are linked with more dynamic theories in interdisciplinary fields.

6.4 Practical Implications

This study has several managerial implications to payment service companies. The findings indicate that the Payment Services Directive II can have significant effect on the field structures of the payment service industry. The study not only sheds light on how different types of companies are planning to react to the changes, but also attempts to answer why the companies may respond in the particular ways.

A key part of the PSD II will be the inclusion of third party providers. This could increase competition among services that the third party providers will be able to provide in parallel with other payment service providers. Nevertheless, some other services may become more focused around smaller groups of more central organizations, as businesses shift their resources to their core competencies. Bigger companies see PSD II more clearly as a threat, while the smaller companies see it as an opportunity.

The payment institutions clearly identified themselves as insiders in the field, while the third party providers considered themselves outsiders or entrant candidates. Looking at the business models of the case companies, all of them were quite similar. All of the companies also rely quite heavily on partner networks, which highlights the importance of the PSD II as it, for the first time, includes third party providers in its scope. The role of the networks in the industry seems to be important, and the PSD II does not appear to mitigate it. Instead, the PSD II merely formalizes the role of third party providers in the network.

Both the payment institutions and third party providers seem to think that things are easier for the other group. The payment institutions think that smaller companies can easily avoid many of the demands. In other words, the expectations and sanctions for not complying would be lower for the third party providers. On the contrary, the third party providers think that it is easier for the payment institutions to manage the demands and be compliant. This seems like a classic 'the grass is greener on the other side' fallacy.

It seems apparent that the PSD II will enhance market entry and make a significant contribution towards the European single market. It may also cause a shift in the company strategies, but only time will show, how the PSD II will develop and become part of the legislative environment in the European Union. However, the need to increase the complexity of the field with yet another regulatory license could be questioned. By the time the PSD II would be harmonized into local legislations, the industry may be facing new challenges requiring changes in the regulations. But a key observation is that the companies are already acting. Both payment institutions and third party providers have acknowledged the upcoming opportunities, and are looking for ways to benefit the most from them. There is a noticeable tension and excitement in the industry. From the standpoint of the end users, the changes will most likely enable new ways of consuming payment services. But for the payment service companies, the question is, who will be the first one to reveal their strategy.

6.5 Limitations

Conducting a case study is complex and demanding and consumes a lot of time in order to achieve meaningful results (Milosevic *et al.* , 2013). Given that the information collected is for a particular group or organization, making generalizations is difficult. Whatever a business undergoes in terms of challenges and successes, the same may not be applicable to another business. Businesses also have different priorities and it is thus wrong to judge one business based on others.

The reliability of the study has been addressed by making the experiments as repeatable as possible. The limitations and sampling have been clearly documented, and the results properly explained. The sample included six companies, three from two different groups, which strengthens the results as they are not based on a one-off observation. In addition, having two interviewees from each company was used to confirm the observations.

The biggest weakness of the study is the subjectivity of the researcher. The interviews were conducted and analyzed by a single researcher, which may compromise the findings. Human judgment is prone to high variation between examiners, caused by the moods, personal opinions and biases. For example, the researchers may have expectations that are based on their previous experiences, or they may be hoping to find certain results. The reliability of the analysis has been addressed by displaying the results of the interviews as accurately as possible, giving the readers a possibility to follow the reasoning of the researcher.

The validity of a research can be assessed at three levels: internal validity, external validity, and construct validity. The *internal validity* — whether causal relations can be determined — has been assessed through an extensive literature review that attempts to understand how institutional complexity can be defined, and what kinds of organizational responses have been previously identified. However, it is important to notice that the interviews have been conducted at a single point of time, and the main topic is a regulation that has not yet been finalized or harmonized into local legislations. In other words, the result of the study is merely a hypothesis of how the companies are likely to respond to the new regulation. A more current subject in the study is, nevertheless, how the companies in general experience institutional complexity. Causal relationships between the characteristics of the companies and the ways they experience institutional complexity are difficult to verify. The causality is mostly based on the findings of previous studies addressed in the literature review.

The *external validity* — whether conclusions can be generalized — has been addressed through clear limitations of the study. The sampling has been limited to payment service companies in Finland. The three payment institutions included in the sample represent one third of all the registered payment institutions in Finland. Therefore, it is relatively safe to claim that, in terms of payment institutions, the sample provides a very good representation of the total population. Third party providers, on the other hand, don not need to register as payment service providers, which makes it more difficult to estimate the total size of the population. There are more than thirty registered payment service providers, and most likely at least another thirty non-registered payment service providers. The third party providers were selected based on their recent media visibility and they were all relatively young companies. This increases the possibility for a biased sample that does not have enough randomness.

The *construct validity* — whether the constructs represent reality — is one of the biggest weaknesses of the research design. The primary source of data was interviews with company representatives. When measuring the experience of institutional complexity, the employees are the most self-evident source of information. However, human judgment is also the most variable source of information. One could argue that the employees are likely to reflect their observations on their previous experiences from other organizations, which could result in providing personal opinions instead of organizational opinions. In other words, alternative sources of data could have been used more to mitigate the problems with construct validity. On the other hand, when asking about the management of external demands, practical information about the operations and communications of the company were used to verify the responses of the company representatives.

In the end, it is good to remember that case studies are used for inductive research, where the purpose is not to test a theory but to develop it (Eisenhardt & Graebner, 2007). The result of this study is merely a hypothesis for a theory that should be researched further.

6.6 Further Research

In terms of future research, it would be interesting to conduct a more detailed study on organizations in the payment service industry, with a bigger sample size and perhaps a broader scope, including banks, for example. As the PSD II is still under development, a long-term case study would be an insightful way to obtain a better understanding of organizational responses to institutional complexities. The study could follow, how the companies act at different stages, from the debate during the development of the regulation until it has been harmonized into local legislations and put into action. In addition, it would be interesting to study especially third party providers, and their role in increasing innovation and technological development in an industry undergoing major changes.

This study was limited in companies based in Finland, but the regulatory changes are the same across the European Economic Area. A similar study in other European countries could be conducted. It would be interesting to see how the experience of institutional complexity varies in different countries and what would be the reasons.

In the interviews, the representatives of the organizations focused mostly on formal demands, giving less attention to informal demands. As mentioned above, formality can make demands clearer and easier to manage (Greenwood *et al.* , 2011). However, it would be interesting to study the informal demands more. The fact that informal demands are less clear would actually indicate that they should increase the overall complexity more than formal demands. On the other hand, informal demands are also easier to ignore, as the risk of sanctions is lower.

In all of the organizations in the study, the personnel appeared to have a significant role in the experience of institutional complexity. The role of the individual representatives and entrepreneurs could be a topic for its own study. Especially among third party providers, individuals with earlier experience from complicated legal environments had clearly a better understanding of the whole situation. The so-called boundary spanners were identified also in the literature review as an important method for responding to institutional complexity (Greenwood *et al.* , 2011; Meyer & Rowan, 1977).

Several smaller observations that could deserve more attention were made in the study. Dunn and Jones (2010) mentioned that organizations between fields experience institutional complexities very differently. Third party providers are entering the payment service industry from the outside, and may also operate in several other fields. It would be interesting to study, how this impacts the experience of the TPPs. When considering the organizational identity, Greenwood *et al.* (2011) pointed out that organizations might make certain decisions because they want to enforce a specific identity. However, the question remains, how often organizations make 'wrong' decision regarding their business models due to the fact that they want to enforce a certain identity? For managing institutional complexity, the compartmentalization strategy — i.e. use of subunits — was identified as a common way for more mature organizations to cope with complexities (Greenwood *et al.* , 2011). The use of subunits, however, has been seen to increase the maturity and complexity of an organization. In other words, mature organizations may be prone to behavior that increases their maturity and complexity even more. Therefore, it could be worth to study, whether the complexity in organizations increases because of the external complexity, causing a vicious cycle of complexity, and what type of changes in the institutional complexity (such as the introduction of new regulations), could reverse this effect.

An interesting topic for future research is also the relationship between institutional complexity and business models. Only a small body of literature has acknowledged this link and most of the attention has occurred merely in the footnotes of other research. This study discovered that institutional complexity has a clear role in the business models of companies, but the observation has yet to be seen in the spotlight of other academic literature.

6.7 Final Words

Despite the criticism that the European Union and its regulations have received, it appears that at least some things are heading to the right direction. It would be impossible to think of a situation in which changing an institutional environment did not face any friction. Nevertheless, both the existing organizations and potential new entrants see the Payment Services Directive II in a positive light and as a regulation that can foster innovation in the industry.

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Appendix A

Interview Template

Please list and evaluate external demands that affect the strategy of the company

External party	Type of demand	Is it a threat or opportunity?	What is the level of importance?	How are changes managed?	Why should the company comply?

Questions regarding PSD II

1. Is the company aware of PSD II?
2. How has the company followed the development of the PSD II and the discussions around it?
3. Does the company see PSD II supporting or conflicting with the current strategy, opportunity or threat?
4. Does the PSD II change the position of the company? Does the company intend to manage the position somehow?
5. Does the company have any dedicated persons whose responsibility is to stay informed about the PSD II? Have they allocated any other resources?
6. Has the company taken any actions regarding the PSD II? If yes, what and why? If no, why? What do you intend to achieve with these actions?
7. Does the company see that the PSD II is somehow different from other regulatory initiatives and changes in the industry?